

# Common Lisp ODATA Client

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# 1 Introduction

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

## 2 Installation

## 3 Usage

## 4 API

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)* *authorization*) [Function]

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)* *authorization*) [Function]

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)* *authorization*) [Function]

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](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`

**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]

**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](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 ( <i>url skip</i> )	[Function]
ODATA/LANG:DEL ( <i>url</i> )	[Function]
Perform a resource deletion request at ODATA service at <i>URL</i> .	
ODATA/LANG:PATH ( <i>url &amp;rest path</i> )	[Function]
ODATA/LANG:\$VALUE ( <i>url</i> )	[Function]
ODATA/LANG:\$SEARCH ( <i>url exp</i> )	[Function]
ODATA/LANG:\$SELECT ( <i>url exp</i> )	[Function]
ODATA/LANG:LINK ( <i>url data</i> )	[Function]
ODATA/LANG:POST ( <i>msgraph::url &amp;optional msgraph::data</i> )	[Function]
ODATA/LANG:FETCH ( <i>msgraph::url &amp;optional type</i> )	[Function]
ODATA/LANG:UPDATE ( <i>url data</i> )	[Function]
Perform a resource update (PUT request) with <i>DATA</i> to ODATA service at <i>URL</i> .	
ODATA/LANG:SINGLETON ( <i>url name</i> )	[Function]
Access the ODATA singleton with <i>name NAME</i> at <i>URL</i> .	
See: <a href="https://www.odata.org/getting-started/advanced-tutorial/#querySingleton">https://www.odata.org/getting-started/advanced-tutorial/#querySingleton</a> .	
ODATA/LANG:COLLECTION ( <i>url name</i> )	[Function]
Access the resource collection at <i>NAME</i> .	
ODATA/LANG:CREATE ( <i>url data</i> )	[Function]
Perform a resource creation request with <i>DATA</i> at ODATA service at <i>URL</i> .	
ODATA/LANG:PATCH ( <i>url data</i> )	[Function]
Perform a resource [PATCH], page 6 request with <i>DATA</i> to ODATA service at <i>URL</i> .	
ODATA/LANG:\$REF ( <i>url</i> )	[Function]
ODATA/LANG:\$EXPAND ( <i>url exp</i> )	[Function]

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(Index is nonexistent)

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