

Vernon CMS Application Programmable Interface (API) v1.2

Introduction

The VCMS API provides direct access to datafiles and records in VCMS. Methods allow for the retrieving of records via search indexes, saved queries or record ids. Specific fields can be selected for the response data format, or a saved report can be used to define the fields to be returned by the API.

Vernon CMS is built on top of the OpenInsight database and development environment. Our API relies on the support for the Common Gateway Interface (CGI) in OpenInsight, as well as third party extensions.

This version of the API is implemented in Vernon CMS version 12.4

Installation

Refer to the document *Vernon CMS API Installation.pdf* in the Wincoll\WEB folder.

API Methods

Here is a brief overview of the API resource end points and parameters. API requests are case insensitive.

End Point	Description
/	List of available Entry Points
/admin	List of available Administration resources
/admin/about	Return information about this implementation of Vernon CMS
/datafiles	List of available Datafiles to query
/datafiles/<datafileID>	List of records in a specific Datafile. The Response is a <i>Summary View</i> .
/datafiles/<datafileID>/fields	List of fields, and aligned groupings, available for a Detail response. Sort fields are in the <i>sort_field_group</i> .
/datafiles/<datafileID>/queries	List of available query keywords for this Datafile. See Query Syntax below.
/datafiles/<datafileID>?<getString>	Options for retrieval and response. See Datafile parameters below. The Response is a <i>Summary View</i> .
/datafiles/<datafileID>/<KeyID>	A specific Record identified by system ID. The Response is a <i>Detail View</i> .

/datafiles/<datafileID>/<KeyID>?<getString>	A specific Record with <i>fields</i> and <i>Sreport</i> options for the response.
/movements	Equivalent to the /datafiles/<datafileID> resource, where <datafileID> is MOVE_LOG A POST request will perform a Movement Transaction on an Object or Packing Unit
/objects	Equivalent to the /datafiles/<datafileID> resource, where <datafileID> is OBJECT
/persons	Equivalent to the /datafiles/<datafileID> resource, where <datafileID> is PERSON

Datafile end point parameters

Parameter	Description
query	A query string to obtain records. See Query Syntax below.
view	The amount of information returned in the response. Can one of the following: <i>id</i> : return just the System ID (as a collection response) <i>summary</i> : return the one-line display, as defined in the datafile's APF record <i>detail</i> : return all fields, or those specified by <i>fields</i>
fields	Specific fields, or groups, to return in a <i>detail</i> view, comma delimited. Must be available in Fields resource. For multi-valued fields or groups, a specific value can be returned by specifying its position in square brackets beside the field/group name. Negative positions are referenced from the end of the field. Also, a range of values can be specified by position using Range notation: [fromPosition TO toPosition] . 'TO' must be specified in capitals, within spaces. Negative positions reference from the end of the field, but <i>fromPosition</i> must always be less than <i>toPosition</i> .
attributes	If specified in the Get String, the response for the fields will be the value of the specified attributes for those fields. If more than one attribute is specified (or none), the response will be a JSON object of those attributes. The available attributes are: <ul style="list-style-type: none"> <i>position</i>: The position of value in a multi-valued field <i>raw</i>: The internal value as stored in the database <i>value</i>: The data to return as the field's value. This is the default for a <i>detail</i> view.
offset	Position in results list to start the response. Default is 1.

limit	Maximum number of records to return in a response. Default is 100 for <i>id</i> View; 50 for <i>summary</i> View; 10 for <i>detail</i> View. Use 0 to return all records.
sort	Sort results by the given field(s) (comma delimited). Sort fields must be in the <i>sort_field_group</i> of the Fields resource
sreport	use the fields and selection criteria specified in a VCMS Saved Report, for a <i>detail</i> view

Query Syntax

query	search query OP query '(' query ')'	
search	keyword':'} (value "'value'" "'value'")	If keyword is unspecified then use a standard VCMS Quick Search, as defined in the datafile's Authority Parameter File configuration record.
value	literal fromLiteral...toLiteral	The search value to look for.
OP	'AND' 'OR' 'NOT' 'XOR'	Valid operators for joining two lists.
keyword	Defined in VC_WS_DATAFILES record.	The keywords are configured by Vernon Systems to perform a specific query method.

Standard keywords available for all Datafiles

search	(Default) Perform a basic Quick Search on primary fields, as defined in the Datafile's APF record.
squery	Perform a Vernon CMS Saved Query. The search value should be the Name of the Saved Query, or its Portfolio ID.
slist	Return records on a Vernon CMS Saved List. The search value should be the Name of the Saved List, or its Portfolio ID.
updated	<p>Search the Update History. (Performs best if indexed in Vernon CMS). The search value has four optional parts, separated by commas: usernames,startTime,endTime,createdOnly (1 or 0) Multiple usernames are delimited by '*'s.</p> <p>startTime and endTime must be entered in DD MMM YYYY HH:MM:SS format (24hr time).</p> <p>If only the day is specified for the startTime, the time will be taken as 00:00:00 If only the day is specified for the endTime, the time will be taken as 23:59:59 (ie, the search is inclusive of the whole Day)</p>

updatesince	Records updated since a precise date and time (inclusive). This must be entered in DD MMM YYYY HH:MM:SS format (24hr time). (Performs best if Update History is indexed in Vernon CMS for large datafiles).
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Special keywords available for specific end points

Parameter	End Point	Description
location_changes	objects	Search for changes in Location The search value has seven optional parts, separated by commas: locationID,externalID,crateID,statusID,startDate,endDate,exclude Inventories (1 or 0)]

Query examples

?query="shell vase"

?query=search:name\matt&limit=100

?query=search:"maker\andrew fagan" OR (search:class\music AND slist:"Mockers")
&offset=100&limit=100

Fields examples

?fields=department&attributes

?fields=department&attributes=raw

?fields=department[-1]&attributes=raw