
MarcExtraction Documentation

Release Beta

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CHAPTER 1

Introduction

This is a Python library that allows a consumer to extract MARC records from

- a file exported to disk
- a VuFind API

CHAPTER 2

Quick start

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3.1 Interface Classes

the interface classes to allow for building a list of records and/or searching for relevant records

class `marcextraction.interfaces.OLERecordFinder` (*bibnumber*, *ole_domain*, *ole_scheme*,
ole_path)

a class to use for finding a particular MARC record from the OLE API

Usage: `finder = OLERecordFinder("1003495521", "https://example.com/oledocstore")` `is_it_there`, `data = finder.get_record()` if `is_it_there`:

return data

get_record()

a public method to get the matching record (if one was found for the inputted bibnumber)

Returns: tuple. first element is boolean result

class `marcextraction.interfaces.OnDiskSearcher` (*writable_object=None*, *location=None*)

a class to use for building up a list of exported MARC files at a particular location on-disk

Usage: `searcher = OnDiskSearcher(location='/path/to/marc/records')` `searcher.search('Cartographic Mathematical Data', 'Spatial coordinates')`

count()

a method to return the total number of records extracted

Returns: int. total records found on-disk

classmethod from_flo (*flo*)

a method to instantiate an instance of `OnDiskExtractor` from a file-like object

Args: `flo` (File Object): a file-like object with read, write methods

Returns: OnDiskSearcher

search (*query_term*, *field*, *subfields*)

a method to search for records matching query term and field lookup

Args: *query_term* (str): the string to be searched. This string will be stemmed in Solr searches.
field (str): a MARC field number as a string
subfields (list): a list of subfield codes related to the field that you want to search

Returns:

list. an iterable containing dictionaries

:rtype list

class `marcextraction.interfaces.SolrIndexSearcher` (*index_url*, *index_type*)

a class to be used to search a Solr index for a query

search (*query_term*, *field*, *subfields*, *rows=1000*, *phrase_search=False*)

a method to run a search on the index for a particular value in a particular field

Args: *query_term* (str): the string to be searched. This string will be stemmed in Solr searches.
field (str): a MARC field number as a string.
subfields (list): a list of subfield codes related to the field that you want to search.

KWArgs: *rows* (int): the number of records that you want to retrieve from the Solr index. default is 1000.
phrase_search (bool): a flag indicating whether you want to perform a full phrase search. Default

is False which will perform a word search.

Returns:

list. An iterable containing dictionaries for each matching record in the Solr index for the query_term, query_field, and query_subfield.

3.2 Utilities for Building Index Field Names and Query Strings

utility functions for working with ole index data

`marcextraction.utils.create_ole_index_field` (*field_name*)

a method to return the marc field name as entered in the OLE index

Args: *field_name* (str): a MARC field number with a subfield code as a single string. Ex '245a'

`marcextraction.utils.create_ole_query` (*field_name*, *query_term*, *phrase_term=False*)

a method to return the query string for searching for making a field query in OLE

Args: *field_name* (str): a MARC field combined with a subfield code with prefix **mdf_**. Ex. 'mdf_245a'.
query_term (str): a word or phrase

Returns: str. A full query string to be entered into a Solr index for searching on a particular field. Ex. 'mdf_245a:banana'

`marcextraction.utils.find_ole_bib_numbers` (*ole_data_list*)

a method to find bib numbers from a set of OLE results

Args: *ole_data_list* (list): a list of dictionaries containing output from a Solr search of an OLE index.

Returns: list. an iterable containing strings that should represent bib numbers. Ex. ['1000435999', '10045334500']

CHAPTER 4

Indices and tables

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- `modindex`
- `search`

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