

## Summary of July 2012 changes to the PLoS ALM API

More information about the PLoS ALM API, including example responses, is available at <https://github.com/articlemetrics/alm/wiki/API>. Please contact Martin Fenner <[mfenner@plos.org](mailto:mfenner@plos.org)> if you have any questions.

Request parameters			
	ALM 1.0	ALM 2.0	Comments
<b>General Options</b>			
	[json xml csv]	unchanged	Response format
	callback=x	unchanged	Will return JSONP
	api_key=API_KEY	unchanged	API key required for all requests
<b>Information about a collection of articles</b>			
<b>Query</b>	/articles.[json xml]?query=STRING&api_key=API_KEY	unchanged	STRING is substring of DOI, useful to search for all articles in a particular journal. Example: <b>"http://alm.plos.org/articles.json?query=journal.pmed&amp;api_key=API_KEY"</b>
<b>Options</b>	order=[doi published_on]	unchanged	Order of results, options are <b>order=doi</b> (default) and <b>order=published_on</b>
	cited=[0 1]	unchanged	Only include articles that have at least one citation (cited=1) or no citations (cited=0)
<b>Information about a single article</b>			
<b>Query</b>	/articles/DOI.[json xml csv]?api_key=API_KEY	unchanged	Example: <b>"http://alm.plos.org/articles/10.1371/journal.pone.0006169.json?api_key=API_KEY"</b>
<b>Options</b>	source=SOURCE	unchanged	Only return results for SOURCE. Ignored unless citations=1 and/or history=1
	citations=1	renamed	Renamed to events=1
	history=1	unchanged	

Response attributes			
	ALM 1.0	ALM 2.0	Comments
	title	unchanged	
	doi	unchanged	
	pub_med	unchanged	PubMed ID (PMID)
	pub_med_central	unchanged	PubMed Central ID (PMCID)
	published	unchanged	Publication date in datetime format. Example: " <b>2009-07-08T00:00:00-07:00</b> "
	updated_at	removed	In ALM 2.0 sources are updated in different intervals, use <b>updated_at</b> parameter of individual sources.
	citations_count	renamed and changed	Renamed to events_count. The number is the sum of the <b>count</b> attribute of all individual sources. The <b>count</b> attribute of individual sources is calculated differently in ALM 2.0 (see below).
Source attributes for requests about a single article (for events=1 and/or history=1)			
	source	unchanged	SOURCE name
	count	changed	In ALM 1.0 this is the number of citation elements, for sources that don't collect individual citations (see below) this number is therefore 1 or 2.  In ALM 2.0 it is the total sum of all the values we get from the sources, and therefore very different from ALM 1.0 for sources that don't collect individual events (counter, biod, pmc, facebook, mendeley).
	public_url	unchanged	
	search_url	removed	
	updated_at	format changed	Changed from timestamp (e.g. <b>1341158683</b> ) to datetime (e.g. " <b>2012-07-02T20:28:35Z</b> ") format
<b>events=1</b>	citations	renamed	Renamed to events. A collection of citations/events.
	citation (for source counter, biod, pmc, facebook, or mendeley)	renamed and changed	In ALM 1.0 sources that don't collect individual citations have 1 or 2 citations. Each citation can contain <b>views</b> (counter, biod, pmc) or other attributes (facebook, mendeley).  In ALM 2.0 sources that don't collect individual events have an event for every time information was collected (e.g. daily or weekly).
	citation (for source citeulike, crossref, scopus, or twitter)	renamed and changed	In ALM 1.0 sources that collect individual citations have citation attributes depending on the source, the data structure is changed.  In ALM 2.0 sources that collect individual events have an <b>event</b> and <b>event_url</b> . The event attributes depend on the source, the data structure is unchanged.
<b>history=1</b>	histories	changed	In ALM 1.0 counts are rolled up every month.  In ALM 2.0 counts are reported for every data point (e.g. daily or weekly), and therefore are not directly comparable to ALM 1.0 historic data.