

# The VIVO APIs

The VIVO APIs are HTTP end-points that can be used to read or write data, or to manage VIVO's operation. They have no user interface, and are intended to be called by external applications that are cooperating with VIVO.

The end-points include:

<b>Public Services</b>	<ul style="list-style-type: none"><li>• available without restriction</li><li>• provide filtered results, allowing restrictions on data</li></ul>
Linked Open Data	Information about an individual, its types, its data values, incoming and outgoing links.
ListRDF	Lists of individuals that belong to a particular class in the ontology. For example, a list of all People, or all Organizations.

<b>Access Controlled Services</b>	<ul style="list-style-type: none"><li>• require account credentials on each request<ul style="list-style-type: none"><li>◦ credentials are for an internal VIVO with sufficient authorization</li></ul></li><li>• results are not filtered, and may return data that should be kept private</li></ul>
SPARQL Query API	Submit a SPARQL query to get information from VIVO. Supports <code>SELECT</code> , <code>ASK</code> , <code>CONSTRUCT</code> , and <code>DESCRIBE</code> query types.
SPARQL Update API	Submit a SPARQL query to <code>INSERT</code> new triples or <code>DELETE</code> existing triples. Also, <code>LOAD</code> triples from a web-accessible file.
Search Indexing API	Submit a list of URIs that may have stale data in the search index. The search data for each of these URIs will be rebuilt.

- [Linked Open Data - requests and responses](#) — All of the public RDF in VIVO is available in response to Linked Open Data requests. VIVO responds to standard LOD requests, and also some request formats that are particular to VIVO. Since 1.0, last modified 1.6.
- [The ListRDF API](#) — External applications can obtain a list of all Persons, or all Organizations, or other classes of Individuals.
- [The SPARQL Query API](#) — Remote applications can submit SPARQL queries to obtain data from VIVO. Since VIVO 1.7.
- [The SPARQL Update API](#) — Remote applications can perform SPARQL Update calls to add RDF to VIVO, or to remove existing RDF. Since VIVO 1.6.
- [The Search Indexing service](#) — The Search Indexing service allows you to request updates to the VIVO search index, but only for a specific set of URIs. If you know which search records are out of date, this is faster than rebuilding the entire index. Since 1.6.