GeoStor 6.0 API

This document will cover all the services we are offering with GeoStor 6.0. We hope that people will develop applications that can utilize them for whatever needs they may have.

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* ArcGIS Server Services
  + These are thoroughly documented on ESRI’s site
    - <http://resources.esri.com/arcgisserver/index.cfm?fa=services>
  + You can access our AGS REST API here:
    - <http://www.geostor.arkansas.gov/arcgis/rest/services/>
* GeoStor Web Services
  + They all output JSON, so you will need JavaScript or any language that understands JSON
    - TODO – provide examples of input/output
  + Here is the address:
    - <http://www.geostor.arkansas.gov/geostorwebservice/geostorws.asmx>
  + WSDL:
    - <http://www.geostor.arkansas.gov/geostorwebservice/geostorws.asmx?WSDL>
  + Here is a breakdown of parameters per web service
    - adv\_search – used for the advanced search page, most developers won’t use this one.
      * <category>string</category>
      * <publisher>string</publisher>
      * <dltype>string</dltype>
      * <strtdate>string</strtdate>
      * <enddate>string</enddate>
    - fmeProxy – this acts as a proxy service between FME Server and the Internet
      * <site>string</site> Values =

[www.geostor.arkansas.gov](http://www.geostor.arkansas.gov)

dev.geostor.arkansas.gov

* + - * <postvars>string</postvars>
        + These are the URL parameters for the FME Server workspace
        + Parameters

Either type of download, vector or raster

[OPT\_requesterEmail=a@a.com](mailto:OPT_requesterEmail=a@a.com) – Email to send results to

OPT\_serviceMode=async – Download type, just put it in there…

WhereClause=where COUNTY\_NAM = |Pulaski| - See “Clip by feature” section for more info. Not used for extent clip but still required

Clipper=ADMIN.COUNTIES\_AHTD – the feature to clip by. See “Clip by feature” section for more info

Format=SHAPE – the format you want your download to come in. See the “Formats” section at the bottom for the allowed formats

CoordinateSystem=LL-WGS84 – Self explanatory, see Coordinate Systems section for allowed values

&MAXX=&MAXY=&MINX=&MINY= - Used for extent clipping, required even if not used

Vector Specific: See “Features to clip from” for more info

SmallClippee

LargeClippee

Raster Specific

Clippee – what layer you want to clip from

* + - * + Ways to Clip

Clip by extent (Uses the MINX, MINY, MAXX, MAXY parameters) currently in UTM – Zone 15N

The Clipper Parameter must be set to EXTENTS

Clip by feature

Allowed Clippers:

The second value is what you would use in the Where clause parameter

Clipper,WhereClause

ADMIN.COUNTIES\_AHTD,COUNTY\_NAM

ADMIN.CITY\_LIMITS\_AHTD,CITY\_NAME

WATER.BASINS\_HUC8\_NRCS,HUC\_8

ADMIN.QUADRANGLES\_CAST,QUAD\_NAME

E.g. &WhereClause=where COUNTY\_NAM = |Pulaski|&Clipper=ADMIN.COUNTIES\_AHTD

* + - * + Features to clip from

Anything you search in GeoStor of the type DL is downloadable

**CAVEAT:** FOR VECTORS ONLY: Everything goes in the SmallClippee parameter except TRANSP.ROADS\_ACF and CADAS.PARCEL\_POLYGON\_CAMP, those go in the LargeClippee parameter. Put DEFAULT in the one you aren’t using.

* + - * + Make sure you put an ampersand between each parameter

Example: (Raster) [OPT\_requesterEmail=geostor@arkansas.gov&OPT\_serviceMode=async&WhereClause=where%20QUAD\_NAME%20=%20%7CO'KEAN%7C&Clipper=ADMIN.QUADRANGLES\_CAST&Format=JPEG&CoordinateSystem=EPSG:26915&Clippee=IMAGE.ORTHO\_DOQQ\_RGB\_ASLIB2006&MAXX=&MAXY=&MINX=&MINY](mailto:OPT_requesterEmail=geostor@arkansas.gov&OPT_serviceMode=async&WhereClause=where%20QUAD_NAME%20=%20%7CO'KEAN%7C&Clipper=ADMIN.QUADRANGLES_CAST&Format=JPEG&CoordinateSystem=EPSG:26915&Clippee=IMAGE.ORTHO_DOQQ_RGB_ASLIB2006&MAXX=&MAXY=&MINX=&MINY)=

Example: (Vector) [OPT\_requesterEmail=geostor@arkansas.gov&OPT\_serviceMode=async&WhereClause=where%20HUC\_8%20=%20%7C08040205%7C&Clipper=WATER.BASINS\_HUC8\_NRCS&Format=PDF2D&CoordinateSystem=LL-WGS84&LargeClippee=DEFAULT&SmallClippee=STRUC.FIRE\_STATIONS\_TGS&MAXX=&MAXY=&MINX=&MINY](mailto:OPT_requesterEmail=geostor@arkansas.gov&OPT_serviceMode=async&WhereClause=where%20HUC_8%20=%20%7C08040205%7C&Clipper=WATER.BASINS_HUC8_NRCS&Format=PDF2D&CoordinateSystem=LL-WGS84&LargeClippee=DEFAULT&SmallClippee=STRUC.FIRE_STATIONS_TGS&MAXX=&MAXY=&MINX=&MINY)=

* + - * <dltype>string</dltype>
        + Values = V or R depending upon whether the download is a vector or raster. See Format table at the bottom of the document.
      * <fmesvc>string</fmesvc>
        + Values =

fmedatadownload

fmedatastreaming

fmejobsubmitter

fmekmllink

WFS

WMS

* + - getData – This fills the drop down lists that are populated dynamically, again not used by most developers
    - search – Search our database for data
      * <input>string</input> - This is the keywords you want to search by
      * <stradv>string</stradv> - if you are doing an advanced search
      * <ID>string</ID> - Searching by a metadata record’s unique id which is found in the metadata (see below in the URL parameters section)
* GeoStor URL Parameters
  + Caveats: You must use the + sign instead of spaces, %20 will not work.
  + ?q=searchterm - adding this to the end of the homepage URL will allow you to search from a URL or link.
    - Examples:
      * <http://www.geostor.arkansas.gov/G6/Home.html?q=water>
      * <http://www.geostor.arkansas.gov/G6/Home.html?q=county+ortho+miller>
  + ?id=uniqueid - adding this to the end of the homepage URL will give you the unique metadata record associated with the ID you gave
    - Examples:
      * <http://www.geostor.arkansas.gov/G6/Home.html?id=bbf7f1801f53d2c3a3fcf719bef46f84>
      * <http://www.geostor.arkansas.gov/G6/Home.html?id=a72da817e217d59c0110915b5e568ffd>
* Streamline Web Services
  + These only output SOAP (XML)
  + Address
    - <http://www.geostor.arkansas.gov/zip9lookupws/zip9lookup.asmx>
  + WSDL
    - <http://www.geostor.arkansas.gov/zip9lookupws/zip9lookup.asmx?WSDL>
  + CAVEATS
    - This service is based upon the Streamline Tax data ONLY!
    - It is NOT for bulk lookups, if you wish to do that contact us and we can run any of these as an offline process
  + Here is a breakdown of the parameters per web service
    - getCities - returns all the cities within a zip code
      * <Zipcode>string</Zipcode>
    - getStreamlineData – this will give you the tax rates for the supplied zip and zip4
      * <Zip>string</Zip>
      * <Zip9>string</Zip9>
    - getZip9 - returns a cleaned address with the Zip4
      * <Street>string</Street>
      * <City>string</City>
      * <Zip>string</Zip>
    - getZipsbyCity – returns all the zips within a city
      * <City>string</City>
* Widgets
  + You can embed a GeoStor search widget on your site, just insert this code where you want the widget to go:
  + <iframe src ="http://www.geostor.arkansas.gov/g6/dev/widget.html" width="190" height="160"><p>Your browser does not support iframes.</p></iframe>

**Formats**

SName is the value you would send to the fmeproxy webservice, type: V is for vector, R is for raster

| **DLFormats** | | |
| --- | --- | --- |
| **Type** | **SName** | **LName** |
| V | SHAPE | ESRI Shape |
| V | OGCKML | Keyhole Markup Language (KML) |
| V | GEODATABASE\_FILE | ESRI File Geodatabase |
| V | GEODATABASE\_MDB | ESRI Personal Geodatabase |
| V | PDF2D | GeoPDF |
| V | GIF | GIF Image |
| V | MITAB | MapInfo TAB |
| V | DWF | AutoCAD DWF |
| V | ACAD | AutoCAD DXF/DWG |
| V | DGNV8 | Microstation Design V8 |
| V | SVG | Scalable Vector Graphics (SVG) |
| V | VML | Vector Markup Language |
| R | GEOTIFF | GEOTIFF |
| R | ESRIASCIIGRID | ESRI ASCII GRID |
| R | ESRIHDR | ESRI BIL |
| R | JPEG2000 | JPEG2000 |
| R | JPEG | JPEG |
| R | GIFRASTER | GIF |
| R | ERDAS | ERDAS IMG |
| R | ERDASRAW | ERDAS RAW |

Examples:

<form action="http://www.geostor.arkansas.gov/geostorwebservice/geostorws.asmx/search" method="POST">

<input name="input"></input><br />

<input name="stradv" type="hidden"></input>

<input name="id" type="hidden"></input>

<input type="submit" value="Enter"> </input>

</form>