The "Simple XML" Format

The standard input format for LocationFinder's Builder

The "Simple XML" format is a way to store locations in an XML format that the LocationFinder's Builder application can read. A "Simple XML" file contains one or more locations. A location describes a named place, such as an address, a street intersection, or any "point of interest". Each location has a centre (x and y coordinates) and/or an extent (x_{min}, y_{min}, x_{max}, y_{max} coordinates), as well as arbitrary fields. Each field is a name=value pair, the name consisting of letters only.

Structure

The XML declaration is optional but recommended. Be sure to specify the correct encoding and use an encoding that is known by .NET. We recommend using UTF-8 (as shown in the example below).

The root element can have any name; this name is ignored. The root element may have an attribute `sref` that states the spatial reference in a format that the LocationFinder can understand (try using the spatial reference's WKID (well-known id) as assigned by EPSG, for example, `sref="4326"` would be for WGS 1984 coordinates). This attribute is optional. Need at least LocationFinder 1.8.

Each element within the root element describes one location. The element's name is the location's type (unless overridden by an attribute or a sub-element named `type`). Each attribute becomes a field of the location (unless overridden by a sub-element).

Each sub-element becomes a field of the location: the element's name is the field's name, and the element's text content is the field's value. If a sub-element has the same name as an attribute, the element overrides the attribute. The name should consist of letters only.

Each location must have a centre and/or an extent. Two fields named x and y specify the centre. Four fields named `xmin`, `ymin`, `xmax`, `ymax` specify the extent. The value of these fields must be a decimal number with optional decimal point (not comma), optional leading minus sign, and no thousand's separators. Depending on data's spatial reference, the x coordinate is a longitude or an easting, and the y coordinate is a latitude or a northing.

Example

```
<?xml version="1.0" encoding="utf-8" ?>        XML declaration
<Root sref="4326">                             root element (optinal sref since v1.8)
  <poi state="VA">                             the 1st location
    <name>Empire State Building</name>
    <state>NY</state>
    <x>1234.5</x>
    <y>2345.6</y>
  </poi>
  <Location type="adr">                        the 2nd location
    <hnr>13a</hnr>
    <str>High Street</str>
    <zip>54321</zip>
```

```
      <city>Hamilton</city>
      <x>888.88</x>
      <y>999.99</y>
   </Location>
</Root>                                          end of root element
```

The XML above describes two locations. The first location has type "poi" (from the element name) and these fields: name=Empire State Building, state=NY (the element overrides the attribute), and centre=(1234.5, 2345.6). The second location has type "adr" (from the type attribute) and these fields: hnr=13a, str=High Street, zip=54321, city=Hamilton, and centre=(888.88, 999.99).