

BrazilAna

Overview

The Brazil Ana import function (<importType>BrazilAna</importType>) imports telemetry data from a custom XML format.

From the BrazilAna data format the following is imported:

- Observation time in the format yyyy-MM-dd HH:mm:ss (DataHora)
- Station code (CodEstacao)
- Discharge (Vazao)
- Level (Nivel)
- Rainfall (Chuva)

Configuring the Import

To make the importer known to FEWS, the import module has to be declared in the moduleInstanceDescriptors.xml in the RegionConfigFiles directory of the FEWS configuration:

```
<?xml version="1.0" encoding="UTF-8"?>
<moduleInstanceDescriptors xmlns="http://www.wldelft.nl/fews"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.wldelft.nl/fews
        http://fews.wldelft.nl/schemas/version1.0/moduleInstanceDescriptors.xsd" version="1.0">
    ...
    <moduleInstanceDescriptor id="ImportBrazilAna">
        <moduleId>TimeSeriesImportRun</moduleId>
    </moduleInstanceDescriptor>
    ...
</moduleInstanceDescriptors>
```

An example of the BrazilAna import configuration is given here. The importType is named **BrazilAna** which should be configured in the general section of the import.

```

<?xml version="1.0" encoding="UTF-8"?>
<timeSeriesImportRun xmlns="http://www.wldelft.nl/fews"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.wldelft.nl/fews
    http://fews.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd">
  <import>
    <general>
      <importType>BrazilAna</importType>
      <folder>$IMPORT_FOLDER$/brazilana</folder>
      <idMapId>ImportBrazilAnaMapId</idMapId>
    </general>
    <timeSeriesSet>
      <moduleInstanceId>ImportBrazilAna</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>H.observed</parameterId>
      <locationId>Brasilia</locationId>
      <timeSeriesType>external historical</timeSeriesType>
      <timeStep unit="hour" multiplier="1"/>
      <readWriteMode>add originals</readWriteMode>
    </timeSeriesSet>
    <timeSeriesSet>
      <moduleInstanceId>ImportBrazilAna</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>Q.observed</parameterId>
      <locationId>Brasilia</locationId>
      <timeSeriesType>external historical</timeSeriesType>
      <timeStep unit="hour" multiplier="1"/>
      <readWriteMode>add originals</readWriteMode>
    </timeSeriesSet>
    <timeSeriesSet>
      <moduleInstanceId>ImportBrazilAna</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>H.simulated</parameterId>
      <locationId>Brasilia</locationId>
      <timeSeriesType>external historical</timeSeriesType>
      <timeStep unit="hour" multiplier="1"/>
      <readWriteMode>add originals</readWriteMode>
    </timeSeriesSet>
  </import>
</timeSeriesImportRun>

```

The IdMapping configuration **ImportBrazilAnaMapId** is important because this maps the internal FEWS Id's to the BrazilAna Id's. An example IdMapping file for the **BrazilAna** importer is shown below.:

```

<?xml version="1.0" encoding="UTF-8"?>
<idMap version="1.1" xmlns="http://www.wldelft.nl/fews"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.wldelft.nl/fews
    http://fews.wldelft.nl/schemas/version1.0/idMap.xsd">
  ....
  <parameter internal="H.observed" external="Nivel"/>
  <parameter internal="Q.observed" external="Vazao"/>
  <parameter internal="H.simulated" external="Chuva"/>

  <location external="40450001" internal="Brasilia" />
  ....
</idMap>

```

Example BrazilAna import file

```

<?xml version="1.0" encoding="utf-8"?>
<DataTable xmlns="http://MRC5/">
  <xs:schema id="NewDataSet" xmlns="" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:msdata="urn:schemas-microsoft-com:xml-msdata">
    <xs:element name="NewDataSet" msdata:IsDataSet="true" msdata:MainDataTable="DadosHidrometereologicos" msdata:UseCurrentLocale="true">
      <xs:complexType>
        <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:element name="DadosHidrometereologicos">
            <xs:complexType>
              <xs:sequence>
                <xs:element name="CodEstacao" type="xs:string" minOccurs="0" />
                <xs:element name="DataHora" type="xs:string" minOccurs="0" />
                <xs:element name="Vazao" type="xs:string" minOccurs="0" />
                <xs:element name="Nivel" type="xs:string" minOccurs="0" />
                <xs:element name="Chuva" type="xs:string" minOccurs="0" />
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:choice>
      </xs:complexType>
    </xs:element>
  </xs:schema>
  <diffgr:diffgram xmlns:msdata="urn:schemas-microsoft-com:xml-msdata" xmlns:diffgr="urn:schemas-microsoft-com:xml-diffgram-v1">
    <DocumentElement xmlns="">
      <DadosHidrometereologicos diffgr:id="DadosHidrometereologicos1" msdata:rowOrder="0">
        <CodEstacao>40450001</CodEstacao>
        <DataHora>2015-03-02 17:00:00 </DataHora>
        <Vazao>64.10</Vazao>
        <Nivel>113.00</Nivel>
        <Chuva />
      </DadosHidrometereologicos>
    </DocumentElement>
  </diffgram>

```