

SHEF - Standard Hydrometeorological Exchange Format

The SHEF import imports scalar time series from SHEF file format. Formats .A (including continuations) and .E are supported in FEWS versions earlier than 2018.02.

In FEWS 2018.2 the SHEF import for .B (including continuations and revisions) has also been implemented and tested for example files provided by NWS.

The SHEF coding manual is provided by the US National Weather Service online and can be downloaded from the [SHEF Information page](#).

Example configuration

An example of the SHEF import configuration file:

```
<?xml version="1.0" encoding="UTF-8"?>
<timeSeriesImportRun xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0/timeSeriesImportRun.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.wldelft.nl/fews">
  <import>
    <general>
      <importType>SHEF</importType>
      <folder>$IMPORT_FOLDER$/RiverForecasts/LMRFC</folder>
      <fileNamePatternFilter>NEWRR5ORN*</fileNamePatternFilter>
      <failedFolder>$FAILED_FOLDER$/RiverForecasts/LMRFC</failedFolder>
      <backupFolder>$BACKUP_FOLDER$/RiverForecasts/LMRFC</backupFolder>
      <deleteImportedFiles>>false</deleteImportedFiles>
      <idMapId>IdImportLMRFCObserved</idMapId>
      <unitConversionsId>ImportEnglishUnits</unitConversionsId>
      <missingValue>-999</missingValue>
      <importTimeZone>
        <timeZoneName>GMT</timeZoneName>
      </importTimeZone>
      <dataFeedId>LMRFC_Paducah_Cairo_LocalFlow</dataFeedId>
    </general>
    <timeSeriesSet>
      <moduleInstanceId>ImportLMRFCObserved</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>QR</parameterId>
      <qualifierId>Loc</qualifierId>
      <qualifierId>Sim</qualifierId>
      <locationId>PAHK2</locationId>
      <locationId>CIRI2</locationId>
      <timeSeriesType>simulated historical</timeSeriesType>
      <timeStep multiplier="6" unit="hour"/>
      <readWriteMode>add originals</readWriteMode>
    </timeSeriesSet>
    <externUnit unit="KCFS" parameterId="QR" />
  </import>
</timeSeriesImportRun>
```

Notes

The SHEF parser does not automatically support all the features that are described in the SHEF coding manual, and the following features will need to be configured manually:

- ID mapping to map the SHEF parameter codes to the correct FEWS parameter id's, location Id's etc. (see the SHEF coding manual)
- unit conversions, especially when the imported SHEF file contains imperial units instead of the SI units used by FEWS internally.
- Time zone conversion.

Java source code

[ShefTimeSeriesParser.java](#)