

# 22-5 Historic events

One of the features of the Deltares Open Archive and its integration in Delft-FEWS is the functionality to define Historical Events. In Delft-FEWS, Historical Events are timeseries, characterized by a period in time, parameters and locations, that together make up an event. Examples are a high rainfall, flood situations etc.

## Defining Historic Events

Historic events are defined by the user in the [Archive Catalogue Display, Events tab](#). It is important to note that the user needs to select "Historic Event" as the event type. On the right side of the display, the user can detail the data that is part of the historical event, by selecting locations and parameters.

The screenshot shows the 'create a new event' form in the Deltares Open Archive. The form has a tabbed interface with 'create a new event' selected. It includes a sidebar with icons for search, create, and download. The main form area has fields for 'area' (Mattagami), 'start time' (Sat 26-03-2022 14:00:00), 'end time' (Mon 28-03-2022 14:00:00), 'name' (Sint Juttemus flood), and 'event type' (Historic Event). A 'description' field is also present. On the right, a 'Summary of archive data' panel shows statistics: simulated data: 0 Mb, observed data: 0 Mb, parameters in observed data: --, locations in observed data: --, and external forecast data: 0 Mb.

After saving and uploading the event to the archive, the event is defined in the Deltares Open Archive as a historical event.

## Deltares Open Archive Historic Events exporter

The Deltares Open Archive contains a component that will export Historic Events that are defined by the users. This is a Task that needs to be defined in the Deltares Open Archive, in the *ArchiveTasksSchedule.xml*. For example:

```
<scheduledArchiveTask>
  <predefinedArchiveTask>historical events exporter</predefinedArchiveTask>
  <description>historical events exporter herstarted</description>
  <startTime>00:00:00</startTime>
  <endTime>23:00:00</endTime>
  <runInterval>1</runInterval>
  <active>true</active>
</scheduledArchiveTask>
```

More information about the configuration of the archive server can be found here: [Configuration of the Delft-FEWS Archive Server](#).

Relevant is that when the Exporter runs, it will export the event in a format that can be imported into Delft-FEWS again. These files are stored in the folder: [Archive root folder]\exportHistoricalEvents\

## Importing Historic Events in the operational system

In order to get the historical event into the operational system, it needs to be imported. For that, an importModule needs to be defined and included in a workflow. More information can be found here: [Import Configuration](#)

The Import module can be pointed directly to the export folder of the Deltares Open Archive ([Archive root folder]\exportHistoricalEvents\). Currently Delft-FEWS does not contain simple user functionality to remove historical events from the database (eg when an incorrect event was defined). Therefore it is advised to manually transfer exported historical events from the export folder to the Import folder. As such, the application manager can keep control of the historical events that are being imported.

## Planned improvements

Several improvements to the functionality have been identified and are likely to be implemented coming years:

- 1) The buttons in the Archive Catalogue Display to detail locations and parameters to include in the event show location and parameters IDs, not names.
- 2) implementation of a more efficient function to select locations and parameters
- 2) functionality to delete Historical Events from the database