This guide describes how to create a series key mapping between two Dataflows.
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2 Overview

A Series Mapping is where the series between two Dataflows have a one to one mapping relationship. The series map can be used to convert data from one Dataflow to conform to the target Dataflow, or to link an external database where the data is held according to one Data Structure, and can be queried according to the structure of another DSD.

The alternative to series mapping is to use a Dataflow Map, the difference is a Series Map defines a source series mapping to a target series, whereas the Dataflow map defines how each Component (Dimension/Attribute) maps, and then provides individual value or code maps per Component. A series map should be used if there is no logical relationship that can be described in terms of Code Maps.
3 Creating a Series Map

To create a Series Map, login to the Fusion Registry as an Agency or Admin user, and click on the Structure Maps-> Series Maps menu item. Click on the cogs button and select Create New Series Map, which will open up the Wizard.

Like all wizards the first step is the details page and requires an Id, Owning Agency, and Name, other fields are optional.

The second step is to define the source and target dataflow. This defines the two Dataflows which will have their series mapped.

The third step is where the mapping is maintained. The mapping is maintained as CSV text in the text area provided. The CSV comprises of a source series, target series, attributes for series. Each series is defined as a colon delimited string, for example A:UK:EMP would be defining values for a Data Structure which comprises of three dimensions, A is the reported value in the first dimension, UK for the second, and EMP in the third. The time dimension is not included in the mapping. Attribute values can be defined for the series, however if the attribute value is based on certain criteria then this can be defined in the last step of the wizard.

An example mapping is:

"A:UK:EMP", "ANNUAL:44:K:G:H","0",,,"CONFIDENTIAL"

Where the source series A:UK:EMP maps to the target series of ANNUAL:44:K:G:H with an output of 0 and CONFIDENTIAL for the attributes. The order of the Attributes is shown in the wizard and all attribute values are optional, with a double comma ‘,,’ to indicate that no value should be output for the attribute (unless specific rules math).

The fourth and final step allows specific attribute rules to be defined; this includes adding a Fixed Attribute and Conditional Attribute.

A Fixed Attribute will apply the same value for all occurrences of the attribute in the dataset, for example a Series level attribute will output the same value for all series.

A Conditional Attribute only applies the attribute value if the condition is met. The condition can be based on the source data or target (converted) data. The condition can be based on the reported values for other components, including the observation value. If there is more than one condition for a rule, all the conditions have to be met before the output value is applied.

If an Attribute is marked as Fixed, Conditional, and has a specific value provided then the precedence in determining the output value is the following:

1. Specific Value
2. Conditional Value
3. Fixed Value
4 Using a Series Map for Data Transformation

A Series Map can be used in data transformation, to achieve this via the User Interface, load the Dataset up which conforms to the Source Dataflow. Ensure this data is linked to the source Dataflow in the Dataset Details page and then click Convert Data.
5 Using a Series Map as a Data Source

If there is data stored against a Dataflow, a Series Map can be used to expose the stored data according to the structure of the mapped Dataflow. To achieve this, ensure the Source Dataflow describes the data that is to be stored, either in the Registry managed database, externally managed database, or from an external web service. The Target Dataflow describes the Dataflow which is to be queried, but where the data will be obtained from the Source Dataflow and mapped dynamically.

This enables the same data source to expose data according to more than one Data Structure Definition. The output data is transformed dynamically and transparently to the user. This is shown in the following process flow.

To achieve this dynamic mapping process, link the Provision Agreement of the Source Dataflow to the SeriesMap. The way this is achieved is to log into the Fusion Registry as an Admin user, click on Admin->Data Manager, and the Series Map is shown as a Data Source. Click on the Series Map, and then click on the cogs icon->Link Provision Agreements. Then link the Source provision agreement to the Map. If the target Dataflow has data available, via any other data store, then it will become available via the web services via mapped source.