

Ed-Fi 2.x Student School Combination Entity Mapping

Overview

This is an Aeries custom entity that behaves like an Ed-Fi entity. It follows the same class pattern implementing overloaded methods and the Ed-Fi framework is able to use it the same as any other Ed-Fi Framework Class using polymorphism.



Document Version 1.5

Status

Ready for certification

Last Updated 25 Feb 2020

Root Table

STU

SQL

Scheduled

STU_Functions.GetEdFiDataTable_StudentSchoolCombination

```
SELECT *
FROM [STU]
WHERE [DEL] = 0 AND [SC] IN (1,2,3)
ORDER BY [ID], [SC]
```

ENR_Functions.GetEdFiDataTable_StudentSchoolCombination

```
SELECT [ENR].[ID], [ENR].[ED], [ENR].[GR], [ENR].[LD], [ENR].[ER], [ENR].[SC], [ENR].[IT], [ENR].[YR], [STU].[GRT]
FROM [ENR]
INNER JOIN [STU] ON [ENR].[ID] = [STU].[ID] AND [ENR].[SC] = [STU].[SC] AND [ENR].[SN] = [STU].[SN]
WHERE [STU].[DEL] = 0 AND [ENR].[DEL] = 0 AND [STU].[SC] IN (993,994) AND ENR.YR = @YR
ORDER BY [ENR].[ED], [ENR].[LD], [ENR].[PR]
```

Real-Time

STU_Functions.GetEdFiDataTable_StudentSchoolCombination

```
SELECT *
FROM [STU]
WHERE [DEL] = 0 AND [SC] IN (1,2,3) AND [DTS] >= @TimeSince
ORDER BY [ID], [SC]
```

ENR_Functions.GetEdFiDataTable_StudentSchoolCombination

```
SELECT [ENR].[ID], [ENR].[ED], [ENR].[GR], [ENR].[LD], [ENR].[ER], [ENR].[SC], [ENR].[IT], [ENR].[YR], [STU].[GRT]
FROM [ENR] INNER JOIN [STU] ON [ENR].[ID] = [STU].[ID] AND [ENR].[SC] = [STU].[SC] AND [ENR].[SN] = [STU].[SN]
WHERE [STU].[DEL] = 0 AND [ENR].[DEL] = 0 AND [STU].[SC] IN (993,994) AND ENR.YR = @YR AND [ENR].[DTS] >= @TimeSince
ORDER BY [ENR].[ED], [ENR].[LD], [ENR].[PR]
```

Purpose

This was created as a proof of concept to deal with the dependency issue between Schools, Students, and Student School Associations.

You can upload Schools and Students all day. But until you successfully upload a Student School Association you will not be able to access the uploaded Student entity resources in the ODS.

This is how Ed-Fi protects student information. It has to be associated with a school and you need to have access to the school to have access to the students in that school.

It's a bit confusing if you don't understand this behavior, because you just uploaded a student and now you want to update the data and you can't. In fact, you can't even read the student data you just inserted if you don't have an association to the school.

Getting Resources

We are actually going to get 3 resources for each Student School Combination resource - School, Student, and Student School Association

1. Get the Student School Associations
2. Loop through all the results
3. For each resource get the school Code and Unique Student Id
4. **Add the Student School Association resource to the results list**
5. Get the School resource by the School Code
6. **Add the School resource info to the results list**
7. Get the Student resource by the Student Id
8. **Add the Student resource info to the results list**
9. Repeat for Student School Association resource in the list.

Upserting Resources

We have special logic to only insert Student and Student School Association data to the database if everything is correct, so no data will get orphaned.

1. Get the **Student** data from the database that needs to be mapped and uploaded to the ODS
2. Get **Student Enrollment** data from the database
3. For each **Student** record
 - a. get a list of **Enrollment** records from the data
 - b. If enrollment records are found
 - i. Process the **Student** entity
If an error occurs it may be that the **Student School Association** does not exist. Keep track of this flag.
 - ii. For each enrollment record process the **Student School Association** entity
 - iii. Then try upserting the **Student** Entity try again.