Analytics Middle Tier

Overview

The Analytics Middle Tier is a set of denormalized analytics views over the database tables backing an Ed-Fi ODS / API, satisfying the user story:

As a district data analyst, I want to build intelligent reporting on the Ed-Fi ODS with minimal learning curve and low risk of breaking changes, so that I can deliver timely data to educators and administrators.

These views form the basis of the Power BI and AWS QuickSight Starter Kits in the Ed-Fi Exchange, and are suitable for use in a wide range of downstream applications.

For more information, see the AMT Overview.

Installing the Views

System administrators install the Analytics Middle Tier into an Ed-Fi ODS database using a command-line utility. Every version of the utility builds on prior releases by migrating the analytics views to the current release, without having to uninstall (though v2.0.0 requires an uninstall of v1.x, if present). The product contains a number of use-case specific collections that are installed as optional components. After install, the system administrator must perform some manual steps to customize the system to the distinct implementation details.

For more information, see the AMT Deployment Guide.

Using the Views

The Analytics Middle Tier contains a core collection of views and a number of use case-specific collections. The Analytics Middle Tier views are a simple representation the Ed-Fi Data Standard, which support a seamless bridge from one version of the Data Standard to the next. The work to simplify and bridge standards comes at cost, however: data analysts and programmers using these views need to understand both their utility and their limitations, or else risk confusion and/or misleading analyses.

For more information, see the AMT User Guide.

Contributing

We welcome your code contributions! Have some useful queries to share with others in the community? Easy: just turn them into views and share via the Analytics Middle Tier.

For more information, see the AMT Contributor Guide.

Related Content From the Ed-Fi Blog

- February 14, 2020: The Analytics Middle Tier Grows Up
- January 16, 2019: (Re)New on the Ed-Fi Exchange: Analytics Starter Kits
- August 7, 2018: From Diagrams & Definitions: Solving the Analytics Reporting Gap