

The NCS Navigator MDES Warehouse

Greater Chicago Study Center

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NCS Navigator Consortium

Abstract

Overview

NCS Navigator is a combination of time-tested tools and utilities custom-made for the needs of the National Children's Study. The NCS Navigator MDES Warehouse is a specialized tool for extracting data from the NCS Navigator suite (see main poster). It transforms the data according to the semantics defined by the Study's Master Data Element Specification and makes it ready to load into the Vanguard Data Repository.

The warehouse automatically refreshes and validates itself on a daily basis, allowing study analysts to identify data problems in advance of the biweekly VDR submissions to the program office. And while the system was developed for performing VDR submissions, as a data warehouse it supports other forms of reporting.

Technical Details

The warehouse is built using the Ruby programming language on top of the PostgreSQL database management system. While it was designed with the needs of the NCS Navigator suite in mind, its transform modules are replaceable. This means that it could provide the same services to other NCS-supporting applications or suites.

The warehouse derives its understanding of the Master Data Elements automatically from the VDR documentation where possible. This means that its data model can largely be automatically updated as new versions of the MDES are published.