Time Series Data Server (TSDS)

Standards-Compliant, Convenient, and Efficient Access to Time Series Data

Overview

The Time Series Data Server (TSDS) is a software framework that enables data providers to easily and efficiently serve data that are a function of time. It supports the NetCDF DAP protocol and standard OPeNDAP web services and is designed to be open for efficient access to time series data.

Clients

The TSDS supports multiple clients, including Java, C++, Perl, and Python. It also supports remote file transfer using HTTP, FTP, and other protocols.

Data Sources

The TSDS supports a variety of data sources, including raw data, relational databases, and remote file servers. It supports a variety of file formats, including NetCDF, OPeNDAP, and HDF5.

Data Collection

The TSDS supports the collection of data from various sources, including remote file servers, databases, and other data providers. It supports the collection of data in various formats, including NetCDF, OPeNDAP, and HDF5.

NetCDF

NetCDF (Network Common Data Form) is a widely used file format for scientific data. The Time Series Data Server (TSDS) supports NetCDF, making it easy to access NetCDF data.

OPeNDAP

OPeNDAP (Open-source Project for a Network Data Access Protocol) is a standard protocol for accessing scientific data. The TSDS supports OPeNDAP, making it easy to access OPeNDAP data.

Data Table

The TSDS provides a data table interface, allowing clients to access data in a tabular format.

Virtual Observatory (VO) Service

The TSDS supports virtual observatory services, enabling clients to access data from multiple sources as if it were a single data source.

Web Application

The TSDS supports web applications, allowing clients to access data through a web interface.

Custom Implementations

The TSDS provides a framework for custom implementations, enabling data providers to add additional functionality to the server.

References


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Common Data Model

http://www.unidata.ucar.edu/software/netcdf/java/CDM/

Common Data Model (CDM)

http://www.unidata.ucar.edu/software/netcdf-java/CDM/

NetCDF Javadoc

http://www.unidata.ucar.edu/software/netcdf-java/javadoc/CDM/

NetCDF-Java API

http://www.unidata.ucar.edu/software/netcdf-java/javadoc/CDM/

Data Table

http://www.unidata.ucar.edu/software/netcdf-java/javadoc/CDM/

Virtual Observatory (VO) Service

http://www.unidata.ucar.edu/software/netcdf-java/javadoc/CDM/

Custom Implementations

http://www.unidata.ucar.edu/software/netcdf-java/javadoc/CDM/

References