



+ Product Fact Sheet

Tradeable Asset Document Database (TADD)

TADD is a repository of reference information describing attributes of tradeable securities and derivatives. It covers multiple asset classes and is easily extensible to cover new asset classes. TADD allows trading firms, brokerages and exchanges to easily keep and maintain reference information about the assets they trade and maintain in their portfolios. Examples of such information might be: the terms of a futures contract, the execution venues where a listed equity option may be traded, the dividends expected to be paid on an equity, and the list of securities and their respective weightings in an exchange traded fund.

How TADD is Different:

TADD is different in the way the data pertaining to an asset is represented. In a typical reference database of asset information, the data is modeled using a relational database management system (RDMS). In this case, a schema is designed to describe and normalize the data. Designing a schema for a single asset class is straight forward; however, designing a schema that is flexible enough to handle multiple asset classes extremely complex. The end result is that the schema that was designed for one or two asset classes becomes difficult (or impossible) to extend when new asset classes need to be added.

The TADD approach models each tradeable asset as a single document. All the information known about that asset is contained in the document and not normalized across multiple related tables. This approach allows new assets to be added by simply creating a new document type rather than attempting to fit the asset type into a predefined schema.

Modeling tradeable asset data as a document is analogous to a Rolodex of business cards: a single business card contains information about a person in the same way that a TADD document contains information about, say, a futures contract. Likewise, the Rolodex is the TADD document database: it contains multiple futures documents, as well as documents for other asset types.

Uses for TADD:

TADD is used by financial systems Front office, middle office and back office applications all require reference information on tradeable assets for trading, risk management and accounting.



Technology:

TADD is implemented around [CouchDB](#) an open source, Apache Licensed, project. It leverages many of the CouchDB features. Information in CouchDB is organized in documents and can be queried and indexed with MapReduce functions implemented in JavaScript. CouchDB exposes a RESTful JSON API allowing TADD to be accessed from any environment using HTTP requests. CouchDB also provides incremental replication allowing instances of TADD to be placed close to the consumers of the information (human or computer process).

Connamara provides a C++, C# and Ruby API to allow applications to access the TADD information store.

TADD provides modules to import and maintain data provided by authoritative sources. It currently supports importing data from CME, OCC, NASDAQ.

In addition to the various API that TADD exposes, it also has a web browser user interface allowing users to search for and display information held in TADD.