



# SUNGARD ALIGNE FRONT OFFICE

Integrated energy transaction solutions.  
Data | Understanding | Action

## Publisher

*Interfaces External Applications with Aligne Front Office Internal Tables*

### Overview

Aligne Front Office Publisher is a stand-alone utility which makes the internal tables used by Aligne Front Office available to external applications. The Publisher uses its interface to 'listen' for requests for new subscriber connections or subscription to tables. Aligne Front Office Publisher also polls the database at regular intervals, looking for records that are of interest to subscribers. When these records are found, the data in the records is prepared and formatted and sent to the subscribers. Aligne Front Office Publisher recognizes new records in the database by means of a 'refresh' column, which is part of the standard audit layer in many Aligne Front Office database tables.

### Published Tables

There are three types of tables that may be published:

**1. Value Added Tables:** Aligne Front Office Publisher performs, joins and utilizes other data manipulations to convert data into a form that will be usable by external systems. Current Value-added tables include:

Table	Screen
ppow	Hourly Power Prices
prcfwd	Forward Prices
prcpow	Half Hourly Power Prices
schedph	Power Scheduling - Schedule Header records
schedpp	Power Scheduling - Schedule Parts records
tpow	Power and Gas Trades
tshape	Power Shapes
cpty	Counterparty
contract	Contract (Master Agreement)

**2. Simple Tables:** Contains a refresh column.

**3. Tables Lacking a Refresh Column:** Since there is no refresh column, Aligne Front Office Publisher cannot recognize 'new' records in the table. Instead, when a subscription request for the table is received, all the rows of the table are sent to the subscriber.

The below process details a high level overview of the publishing process:

- The Table Monitor watches for changes in the database and notifies the Subscription Manager if any changes occur.
- The Subscription Manager determines which (if any) of its clients are interested in this update.
- The relevant fields are collected and converted into a standardized form based upon the Aligne Front Office Data Dictionary.
- The Value-Added Data helper-function is used to add additional fields that go beyond simple formatting of data. For prices, trades and schedules, Aligne Front Office Publisher does not simply pass on the data exactly as it exists in the database. Much pre-processing takes place before it is sent out.

For example, when power trades are published, Align Front Office Publisher:

- Converts various single byte values into more useful string values (such as firm into firm type). This is usually joined with the user value table.
- Converts bit masks into string masks (such as the days mask and status mask).
- Performs table joins to find all pieces of a multi-block trade.

*Note that for tables not included above, otherwise known as Non-Value Added Data, Align Front Office Publisher simply reports the values in the source table. When a user requests updates from one of these tables, the Publisher will label the fields with database field names and send the data as it exists in the database. In the subscription, the user must specify the fields they want. For proper synchronization, these tables should have a refresh number.*

- Since the naming conventions of various systems are almost certainly different, we have included the ability to map Align Front Office values into "source" values using the mapping table. Using the source-name, field-name, and Align Front Office value, the Publisher attempts to find the equivalent external source value. If it exists, the Align Front Office value is replaced with the source value. If not, it is left untouched. Mapping values are housed in the import\_map table. Clients can customize mapped values using the Mapping Screen in Align Front Office screens.
- The data is then converted into an output form based upon the style the subscriber requested (either XML or TIB). The XML is now sent from the Publisher to the Subscribe Client. The Subscribe Client is responsible for processing the message.

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## ABOUT SUNGARD ENERGY SOLUTIONS

SunGard's energy solutions help energy companies, industrials and financial services organizations, to efficiently compete in global energy markets by streamlining and integrating the trading, risk management and operations of physical commodities and their associated financial instruments. These solutions provide front to back-office support for capturing deals, delivering market data for valuation, clearing and reconciliation of transactions, invoicing and accounting for transactions, analysis and management of risk, and physical transmission or delivery of commodities. SunGard Energy Solutions also support the logistics and inventory of fuels used in producing power and industrial products.

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