

TFF

TAS Financial Framework

The quick evolution of technological infrastructure for trading on markets, Multilateral Trading Facilities (MTF) and towards Brokers, and the greater and greater number of Trading Venues breaking into the financial world imply the usage of modular connection tools, that can be easily configured and that allow the access to the new target Trading Venues minimizing architectural impacts.

SOLUTION

TAS Financial Framework (TFF) is the market access application developed in order to maximize trading performances and minimize architectural investments.

TFF is easy to use, easy to integrate with the existing customers' systems; it is a flexible application that matches the customers' need in terms of trading connections. TFF can be used for accessing all the leading markets (Italian and International), all the MTFs (Multilateral Trading Facilities) that are breaking into the European financial markets after that the MiFID regulation came into force, and the main International Brokers. TFF can be easily connected to Front Office systems or order management tools. The application offers high performances in terms of order submission towards the defined targets.

Moreover, TFF can receive and normalize various price feeds (markets, MTF, Information Providers, etc.) and re-disseminate the price feed to other customers' applications (either provided by TAS or not).

TFF, as well as all other TAS applications is available in housing at our datacentres of Milan and London through the TAS Plug & Go Service.

BENEFITS

TFF can easily interact with any trading target, both in terms of order submission and execution reports reception and in terms of price feed reception.

FEATURES

- **Markets, Brokers and MTFs connection** –TFF can connect to various markets, Brokers and MTF through a unique connection protocol
- **Routing** – TFF can route order towards the defined targets according to rules established by the customer and based on different parameters (sender, instrument type, quantity, etc.)
- **Price feed reception** –TFF can receive the price feed from

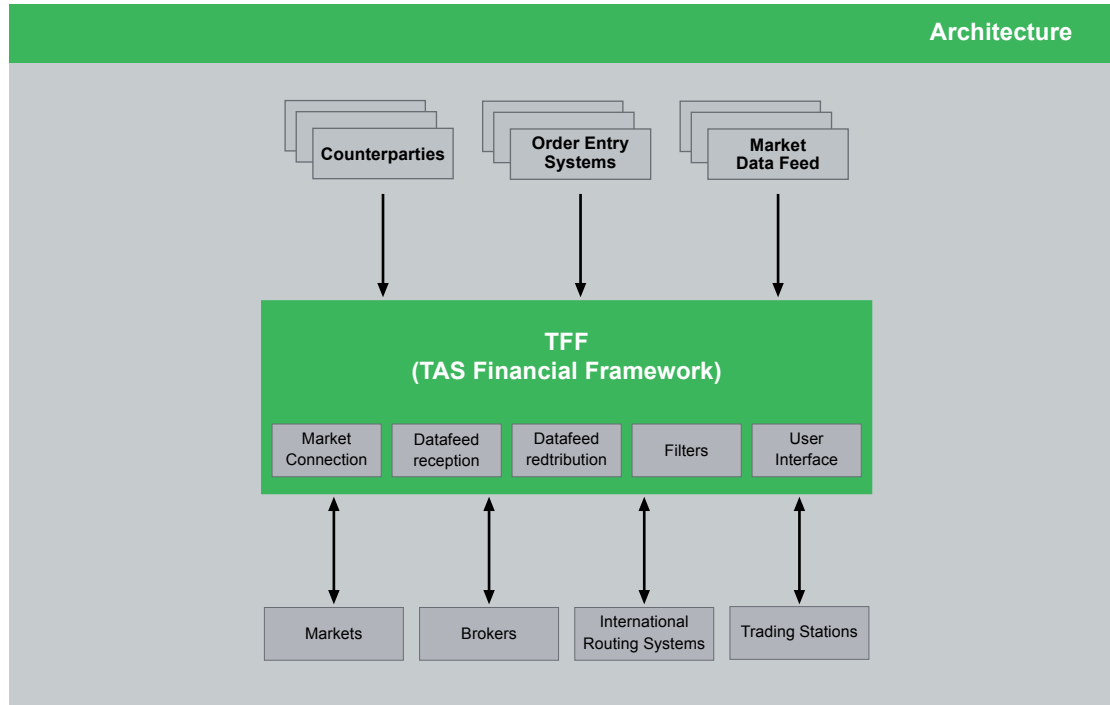
various sources (markets, MTFs, Information Providers)

- **Re-dissemination of the price feed** –TFF can re-disseminate the price feed, through a unique protocol, towards other applications either provided by TAS or by other vendors
- **Interaction with other applications** – TFF can easily and quickly be connected to various applications (either provided by TAS or by other vendors). In particular TFF can be connected to:
 - order management applications
 - Front Office applications (e.g. client **VT Multimarket** provided by **Visual Trader Systems SL - Borsa de Madrid, TAS TeleOrderEntry**, and others)
 - Back-Office applications and/or procedures
- **Filters** – it is possible to set-up filters on TFF in order to block some kind of orders (over a certain quantity or countervalue, on certain instruments, etc.)
- **Performances** – TFF has extremely high performances, both in terms of order sending time (less than one millisecond) and in terms of price feed reception and re-dissemination
- **Scalability** – with TFF it is possible to add or remove Trading Venues with minimum infrastructural impacts on other applications
- **Fault Tolerance and Recovery** –TFF can be delivered over a cluster of several hardware components in order to guarantee system **Fault Tolerance** features and to provide automatic system status **Recovery** after an hardware fault
- **User multifunctional interface** – TFF has a user multifunctional interface that enables:
 - centralised management of all order and message flows
 - management of system information and connection status
 - modification of system configuration (e.g. destination markets, MTFs and Brokers configurations)

ARCHITECTURE

TFF modular architecture facilitates the application's integration into the existing logical and technological infrastructures and

minimizes the impact on the existing customers' systems.



TECHNICAL REQUIREMENTS

Platform

- IBM-AX
- WINDOWS

Server

- C++

Database

- ORACLE