Trade Order Management on **FRS** **Invest|Pro™**

Invest|Pro™ automated dealing and settlement process

Invest|Pro™ provides real-time straight through processing of trade orders in mutual funds with investment management groups using electronic trading platforms offering over 10,000 trading links in 30 countries.

For Investment managers, defined contribution pension schemes and the non-life sector Invest|Pro™ does cash allocation, rebalancing and order creation to settlement directly linking to electronic trading platforms.
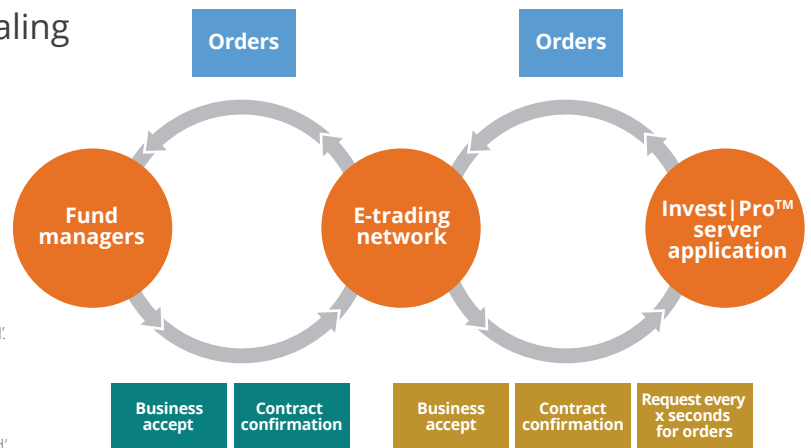
For life assurance companies Invest|Pro™ imports forecast cashflows/unit movements from their policy administration system(s) and automatically creates trades based on investment splits for the external securities to be purchased/sold by each fund.

Invest|Pro™ creates trades using these in-built algorithms or alternatively trades can be manually entered and edited directly on the Invest|Pro™ trading screens by users with the appropriate system rights prior to being sent to the market.

Invest|Pro™
Automated Dealing

Figure 1. Invest|Pro™ Automated Dealing

- The E-trading network polls the Invest|Pro™ server application at pre-determined intervals such as every 30 seconds to check if there are orders waiting for transmission to the market.
- Trades are automatically transmitted to the dealing counterparty by the E-trading network using:
  - ISO20022/15022 standard messages
  - FIX protocols or proprietary formats
- Trades in the same security across multiple funds can be aggregated into a single market order or sent individually.
- The deal status on the Invest|Pro™ database automatically changes to 'Deal Ordered'.
- The dealing counterparty will send a 'business accept' message to the E-trading network confirming receipt of the trade order. Which is then automatically sent to Invest|Pro™ server application.
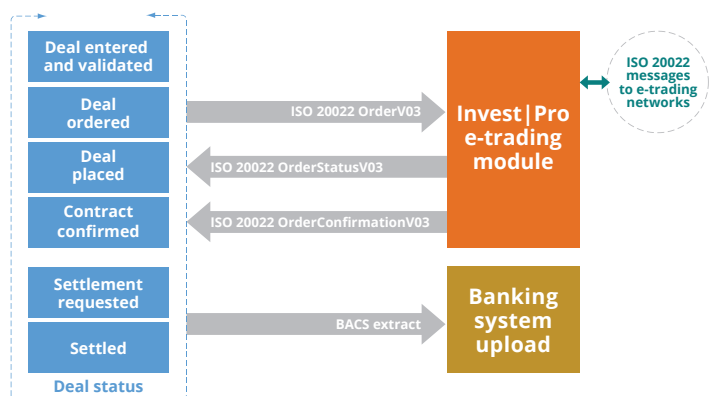- The deal status on the Invest|Pro™ database automatically changes to 'Deal Placed'.

Orders — **Orders**

Fund managers — **E-trading network** — **Invest|Pro™ server application**

| Business accept | Contract confirmation | | Business accept | Contract confirmation | Request every x seconds for orders |

Invest|Pro™ Automated Links with Dealing Platforms

all funds BANK — Calastone — DEXIA — Citi — Morgan Stanley

Figure 2. Invest|Pro™ Electronic Trading Message Flow

- Trade confirmations are electronically received from the dealing counterparty (using similar protocols).
- The deal status on the Invest|Pro™ database automatically changes to 'Contract Confirmed'.
- Settlement – there are a number of possible approaches to Settlement. Settlement can be automated through CREST or Euroclear or a settlement extract can be created by Invest|Pro™ which is fed into a banking settlement system.
- Invest|Pro™ creates 'Dealing Tickets' for investment managers who are not in a position to trade via an automated trading system. These can be e-mailed or faxed to the investment manager/administrator.
- Invest|Pro™ automatically creates cash flow advices for managed funds where the investment manager decides the asset allocation and stock selection. Trades confirmations can also be electronically received from the investment manager directly.
- All results are stored in the database, date stamped and archived.
- The typical minimum set of trade statuses through which a trade passes for Invest|Pro™ E-trading is shown in Figure 2.

Deal entered and validated
Deal ordered — ISO 20022 OrderV03
Deal placed — ISO 20022 OrderStatusV03
Contract confirmed — ISO 20022 OrderConfirmationV03

Invest|Pro e-trading module

ISO 20022 messages to e-trading networks

Settlement requested
Settled — BACS extract — **Banking system upload**

Deal status

Trade Order Management on Invest|Pro™

Order Management on Invest|Pro™ – Some Order Status Options:

- Reversed
- Cancelled
- Entered
- Pending Match
- Pending Rights
- Pending Prior Settlement
- Validated

- Order Not Notified
- Ordered
- Requires First Authorisation
- Requires Third Authorisation
- Pre Trade Request Settlement
- Settled Pending Verification
- Passed Authorisations

- Pre Trade Settled
- Validated Internal Fund Deals
- Placed
- Contract Confirmed
- Settlement Requested
- Settled Not Reported
- Settled

Invest|Pro™ Trade Order Management – Summary

- **Order Management processing is fully-automated within rigorous controls**
  - Validations and alerts
  - Scheduled process to match cut-offs

- **Invest|Pro™ creates orders based on cash allocation runs**
  - Orders can be edited manually (if necessary and subject to user rights)
  - Manual orders can be added (if necessary and subject to user rights)
  - 'Dealing Tickets' for Mirror Fund Investment Managers can be created
  - Cashflow for non unitised managers / internal funds can be created

- **All trading stages are user configurable**

- **All trading processes are user configurable**

- **All results are stored in the Invest|Pro™ database**

- **Alerts, rule breaches and management information analytics are all available**

Archaic dealing practices have plagued the investment administration sector for a long time. Invest|Pro™ offers a solution to automate trading practices with a single integrated, solution, which is scalable and can be rigorously controlled

About Financial Risk Solutions ltd (FRS)

FRS license software for unit pricing/NAV calculation, asset/lability unit matching, Solvency II asset QRT's and compliance oversight to the life assurance industry. FRS's Invest|Pro™ and Invest|GRC™ is used by thirty life companies and five outsourcers.