



TRADEExpress™ Event System

A flexible and high performance application available both in a financial event derivatives version and a betting version.

Introduction

TRADEExpress™ Event System is a flexible and high performance application with two versions:

- Financial event derivatives, such as binary options and range futures.
- Betting

The system is designed to bring the highest financial industry standards for reliability, scalability and flexibility also into these markets. It is suitable for gaming operators such as betting exchanges and bookmakers as well as financial marketplaces.

The Event System is based on TRADEExpress, the platform underlying all of our offerings to the financial industry. The system offers a wide array of business functionality connected to betting and financial event derivative trading. Its modular design allows for customer specific configurations and branding, which is an integral part of the delivery process. Additional functionality, markets and instruments can easily be implemented, enabling short time-to-market for new products and services.

Market operators can choose to set up the Event System in different market modes for various instruments. Either as a single dealer market, as a bookmaker's betting system, or as an exchange where users place orders on both sides of the book (back/lay, bid/ask) to establish a fair market. Such market structures can be established on a market-by-market basis and be run simultaneously for the same event.

The system includes a real-time risk model that displays current exposure. The risk calculation algorithm enables netting over selections within the same market, on an order-by-order basis.

It includes a model for automatic as well as manual management of events and results and is configurable for live betting in parallel with Ante Post betting.

All trading and administrative processes are carried out in one system. The graphic user interface comes in two versions: a thin web client for end users and a thick client for administration.

The administration client

The system architecture offers a solution that is scalable in several dimensions. You can thus boost performance when the market demands it. The system is well suited for integration with third party systems, and includes a documented open API. Integration is typically made with third-party trading applications, general ledgers, client registers, information systems and payment solution systems.

The system is extendable to handle an unlimited array of underlying events. The instruments are typically based on sport events, the market price of a financial security, exchange rates or outcome of an economic indicator.

The TRADEExpress Platform

Event System, as with all of Cinnober's offerings, is based on the TRADEExpress platform, which includes all infrastructural components needed for mission-critical transaction solutions. It provides outstanding performance in terms of low latency, high throughput, scalability, easy monitoring and fault tolerance.

TRADEExpress is currently in production in several demanding, high-transaction environments.

TRADEExpress is implemented in Java and is thus platform-independent. It runs on all hardware and software platforms that support Java Virtual Machine (JVM) and supports a wide range of operating systems and databases (Oracle, MySQL, IBM DB2, Sybase, Microsoft SQL Server databases).

The platform has a fault-tolerant architecture that runs servers in redundant pairs, usually at two different sites. If a primary server fails, the hot standby immediately takes over without missing a beat – or a single byte. This means that no transactions are lost and the failover time is virtually zero.

Moreover, there is no need for specialized, expensive clustered disks or databases. This reduces the cost of production and test environments and simplifies deployment. You can optimize the choice of HW and SW platforms considering both procurement and support costs as well as the operating experience of your own organization.

The administration client

Event	Market	MO	Selection	SO	Expiration	Block (100s)	Low (100s)	Last Trade	Overbid	Outbid
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	3:45	3:45	3:39	3:45	4:00	3:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	4:00	4:00	4:00	4:00	4:00	4:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	4:15	4:15	4:15	4:15	4:15	4:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	4:30	4:30	4:30	4:30	4:30	4:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	4:45	4:45	4:45	4:45	4:45	4:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	5:00	5:00	5:00	5:00	5:00	5:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	5:15	5:15	5:15	5:15	5:15	5:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	5:30	5:30	5:30	5:30	5:30	5:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	5:45	5:45	5:45	5:45	5:45	5:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	6:00	6:00	6:00	6:00	6:00	6:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	6:15	6:15	6:15	6:15	6:15	6:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	6:30	6:30	6:30	6:30	6:30	6:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	6:45	6:45	6:45	6:45	6:45	6:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	7:00	7:00	7:00	7:00	7:00	7:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	7:15	7:15	7:15	7:15	7:15	7:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	7:30	7:30	7:30	7:30	7:30	7:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	7:45	7:45	7:45	7:45	7:45	7:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	8:00	8:00	8:00	8:00	8:00	8:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	8:15	8:15	8:15	8:15	8:15	8:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	8:30	8:30	8:30	8:30	8:30	8:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	8:45	8:45	8:45	8:45	8:45	8:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	9:00	9:00	9:00	9:00	9:00	9:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	9:15	9:15	9:15	9:15	9:15	9:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	9:30	9:30	9:30	9:30	9:30	9:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	9:45	9:45	9:45	9:45	9:45	9:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	10:00	10:00	10:00	10:00	10:00	10:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	10:15	10:15	10:15	10:15	10:15	10:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	10:30	10:30	10:30	10:30	10:30	10:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	10:45	10:45	10:45	10:45	10:45	10:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	11:00	11:00	11:00	11:00	11:00	11:00
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	11:15	11:15	11:15	11:15	11:15	11:15
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	11:30	11:30	11:30	11:30	11:30	11:30
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	11:45	11:45	11:45	11:45	11:45	11:45
Domeno Elev v. RealMarket	Match venue	Drain	Drain	Drain	12:00	12:00	12:00	12:00	12:00	12:00

Passion for change | Cinnober provides mission-critical solutions to the world's most demanding financial marketplaces.

We are passionate about one thing: applying advanced financial technology to help marketplaces seize new opportunities in times of change.

We build partnerships with our customers based on trust and transparency. We serve banks, exchanges, brokerage firms and other actors that have extreme demands on business functionality, high throughput and low latency.

We currently have product-based offerings for a number of areas, such as marketplaces, post-trade management and binary markets. All solutions use our TRADExpress™ technology, designed for scalability and flexibility.

Among our customers are Alpha Trading Systems, Turquoise, Markit BOAT, the Chicago Board Options Exchange, Liffe NYSE Euronext, the London Metal Exchange, Deutsche Bank, Borsa Italiana and the American Stock Exchange.

We are an independent provider of marketplace solutions, and do not operate a market of our own, avoiding any conflicts of interest. We are not owned by – nor have any ownership interests in – any market operator.

Our track record says it all. We help our customers turn change into a competitive advantage.



Cinnober Financial Technology AB
 Kungsgatan 36
 SE-111 35 Stockholm
 Sweden
 +46 8 503 047 0
 cinnober.com