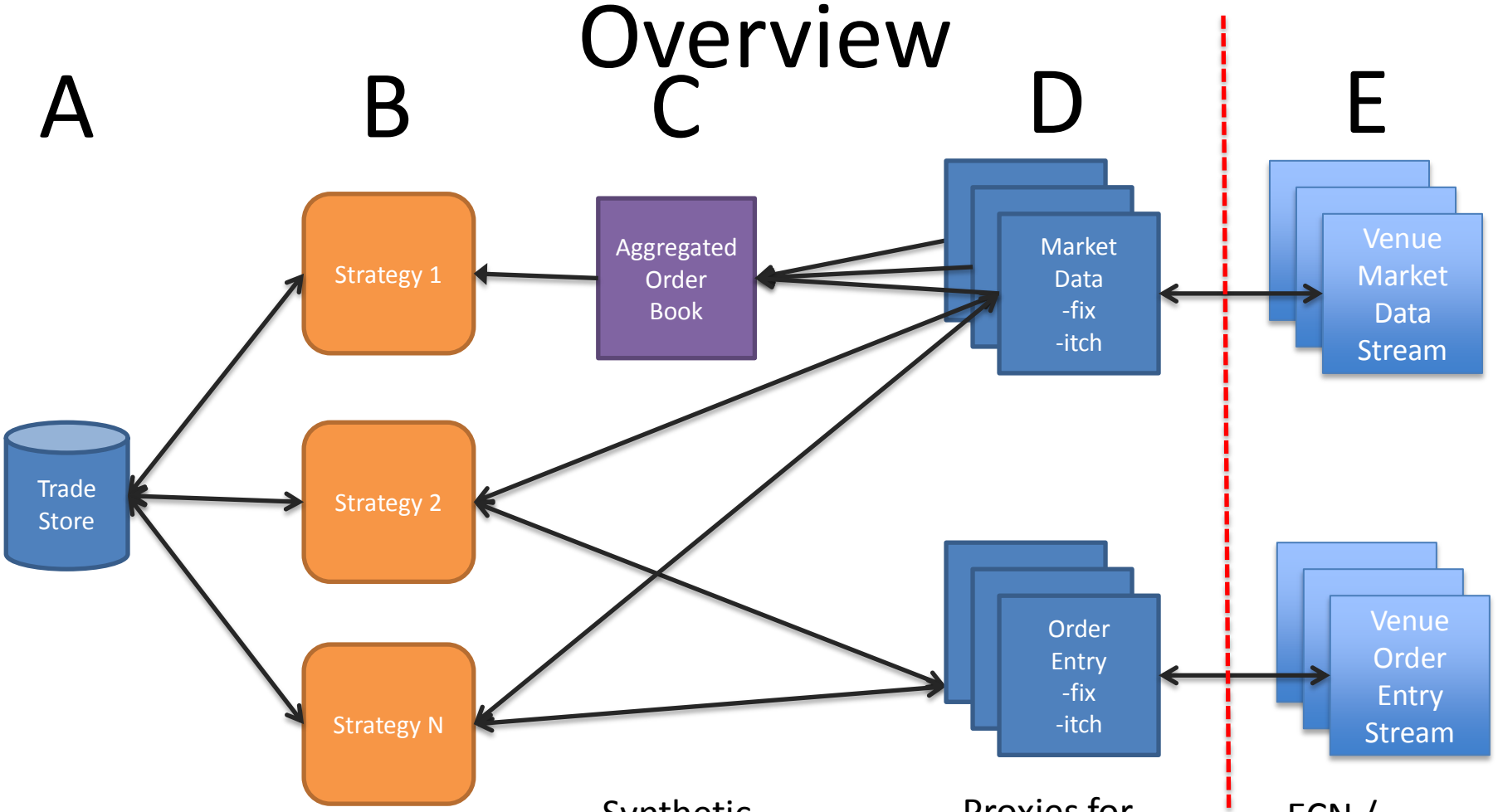
System K Overview

An open source trading framework

Overview



Durable Store for Trade Info

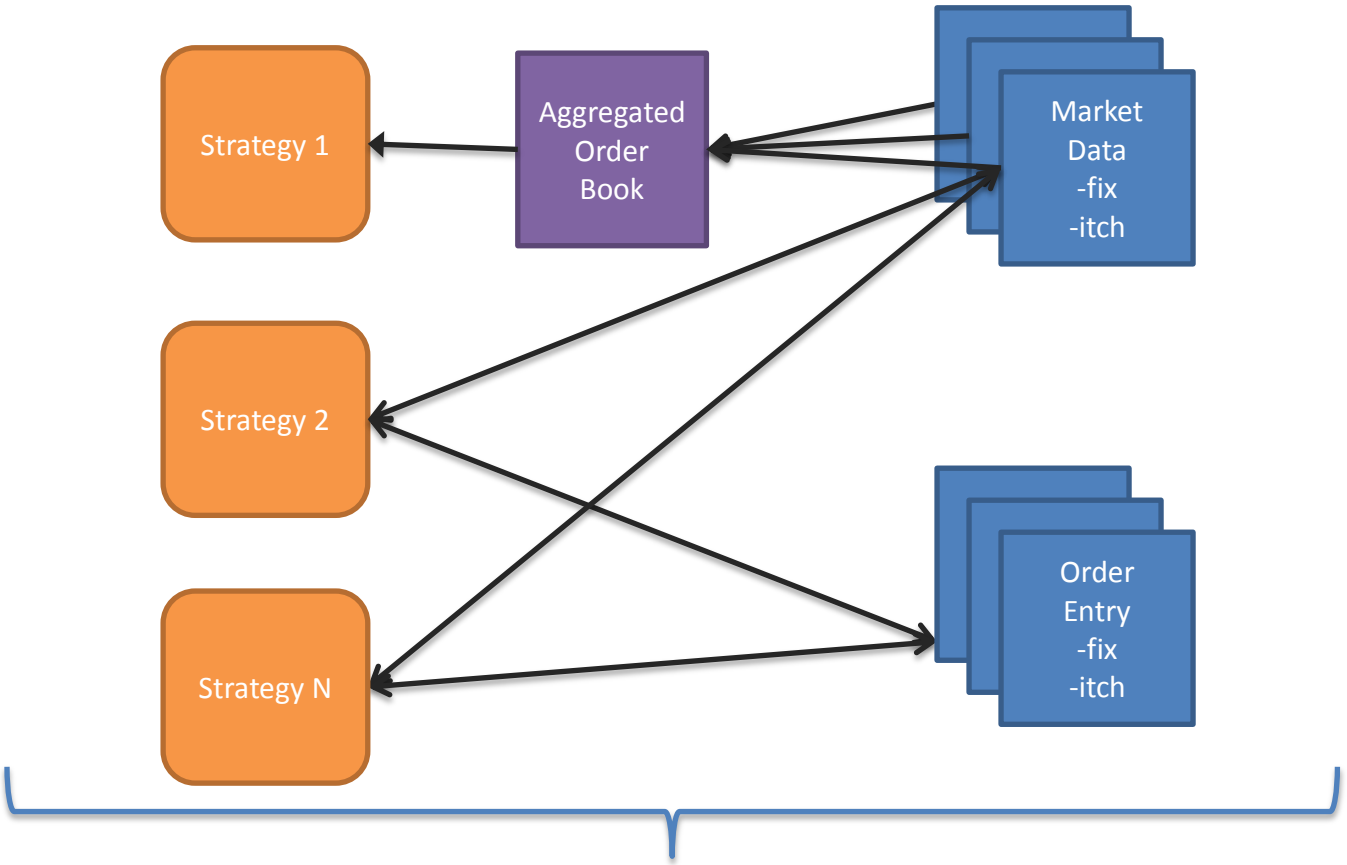
Trading strategies written with API

Synthetic order book created from all markets

Proxies for market data incoming and order entry outgoing

ECN / Trading venues via Internet, direct, VPN, etc

Configuration Server



All components request network configuration from config server
Config server runs as daemon
Local information provided by config file or command line

Things to note

- There is one unique process for market data receipt for each market (1:1)
- There is one unique process for order entry for each market (1:1)
- Aggregated book is an optional component
- Trade serialization is now in MYSQL but can be any DB even no-SQL
- Market data and order entry can use any protocol
- Market data is normalized in the market data receiver before being forwarded to strategies

Things to note (2)

- Components use TCP but can use UDP or PGM
- Market data is pub/sub
- Order entry is TCP but not synchronous (i.e. not request/response)

Flow

- Market data connectors initiate connections to venues and start flow (subscription type specified in config file)