

A stylized, abstract background featuring a globe with curved, overlapping lines in shades of olive green and gold, creating a sense of motion and global connectivity.

REVOLUTION CAPITAL MANAGEMENT

INTRA-DAY SYSTEM OVERVIEW

This page is intentionally left blank.

Version 12.1.1.1



COPYRIGHT 2012 REVOLUTION CAPITAL MANAGEMENT
RCM CONFIDENTIAL - DO NOT DISTRIBUTE

IMPORTANT NOTICES

By accessing this presentation herein, the reader hereby agrees to the following conditions:

- The reader will not disclose the information or data herein in any fashion (including but not limited to verbal, written or electronic means) to any outside party for any purpose whatsoever.
- The reader intends to use the data for internal research purposes only.
- The reader qualifies as a “Qualified Eligible Person” (QEP) as defined in CFTC Regulation 4.7.
- The reader acknowledges that the information contained herein abides by NFA Compliance Rule 2-29 regarding the use of hypothetical performance results.

This document is not a solicitation for investment. Such an investment is offered only on the basis of information and representations that are made in the appropriate offering documents. No representation is made that an investor will achieve similar results. Futures trading is speculative and involves substantial risk.



Section 1

End-of-day/Intra-day Synergies



INTRA-DAY PROPERTIES

- Intra-day (ID) model architectures are similar to existing end-of-day (EOD) models.
- We have 33 different ID models that exploit a wide variety of dynamics.
- Sixteen (16) of these are complementary to the current Mosaic program.
- The system trades 24 hours a day via automated signaling and execution.
- Signals are generated 12-16 times per day depending on the market (this is not a “high-frequency” liquidity provision/market-making system).

SUMMARY OF REAL-TIME TESTING

- Started with e-mini S&P 500 in April 2010.
- Evolved to a 4-market ensemble (S&P 500, Crude Oil, Euro, 10-year US Note) in August 2010 with a trading level of roughly \$1 million.
- Twelve (12) market ensemble began trading in March 2011. Trading level was roughly \$10 million at 12% annualized volatility.
- Final 25-market ensemble began trading in October 2011.
 - Currencies (5): Australian \$, British Pound, Euro, Japanese Yen, Swiss Franc
 - Grains (3): Corn, Soybeans, Wheat
 - Energies (3): Crude Oil, Heating Oil, Natural Gas
 - Metals (3): Gold, Copper, Silver
 - Stock Indices (5): Dax, Nasdaq, S&P 500, Euro Stoxx 50*, FTSE
 - Interest Rates (6): Bobl, Bund, Gilt, 10-yr. US Note, 5-yr. US Note, 30-yr. US Bond
- Prior to October 2011, ID model mix included models with EOD overlap. Final mix is complementary to EOD model suite.
- Trading was halted in November 2011 due to MF Global bankruptcy.
- Multiple infrastructure enhancements were made subsequent to this (see Section 3 for full discussion).
- Trading was restarted in late December 2011.

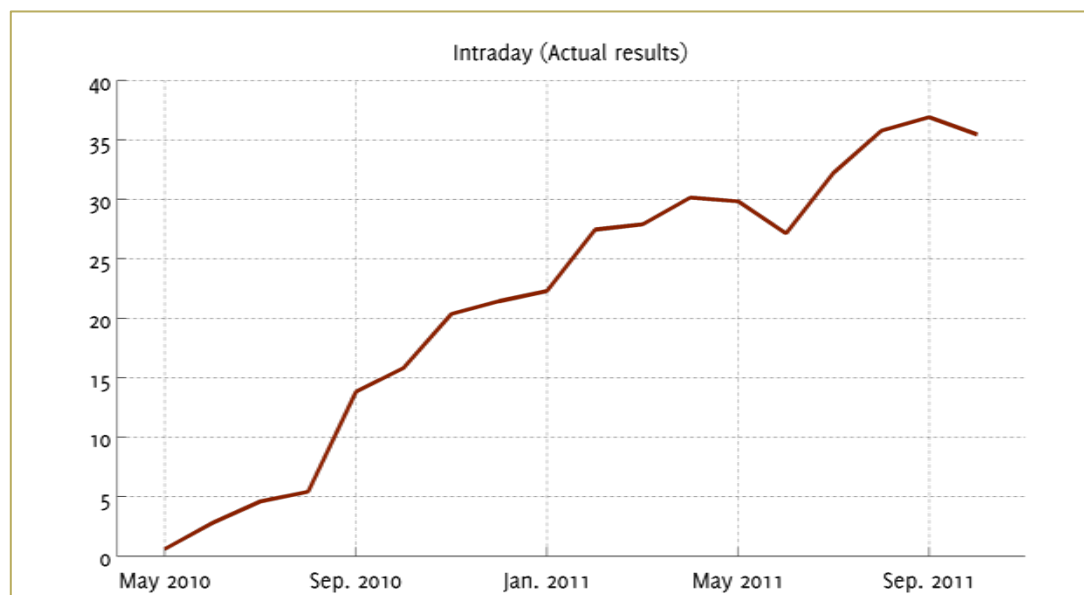
*Euro Stoxx 50 is on trading hiatus until shorting ban is lifted



COPYRIGHT 2012 REVOLUTION CAPITAL MANAGEMENT

RCM CONFIDENTIAL - DO NOT DISTRIBUTE

ID PROPRIETARY TRADING OVERVIEW



PERFORMANCE TABLE													
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
2011	0.84	5.16	0.45	2.25	-0.32	-2.70	5.12	3.53	1.14	-1.45	-	-	14.01
2010	-	-	-	-	0.59	2.21	1.80	0.81	8.42	1.99	4.55	1.07	21.44

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE PERFORMANCE.

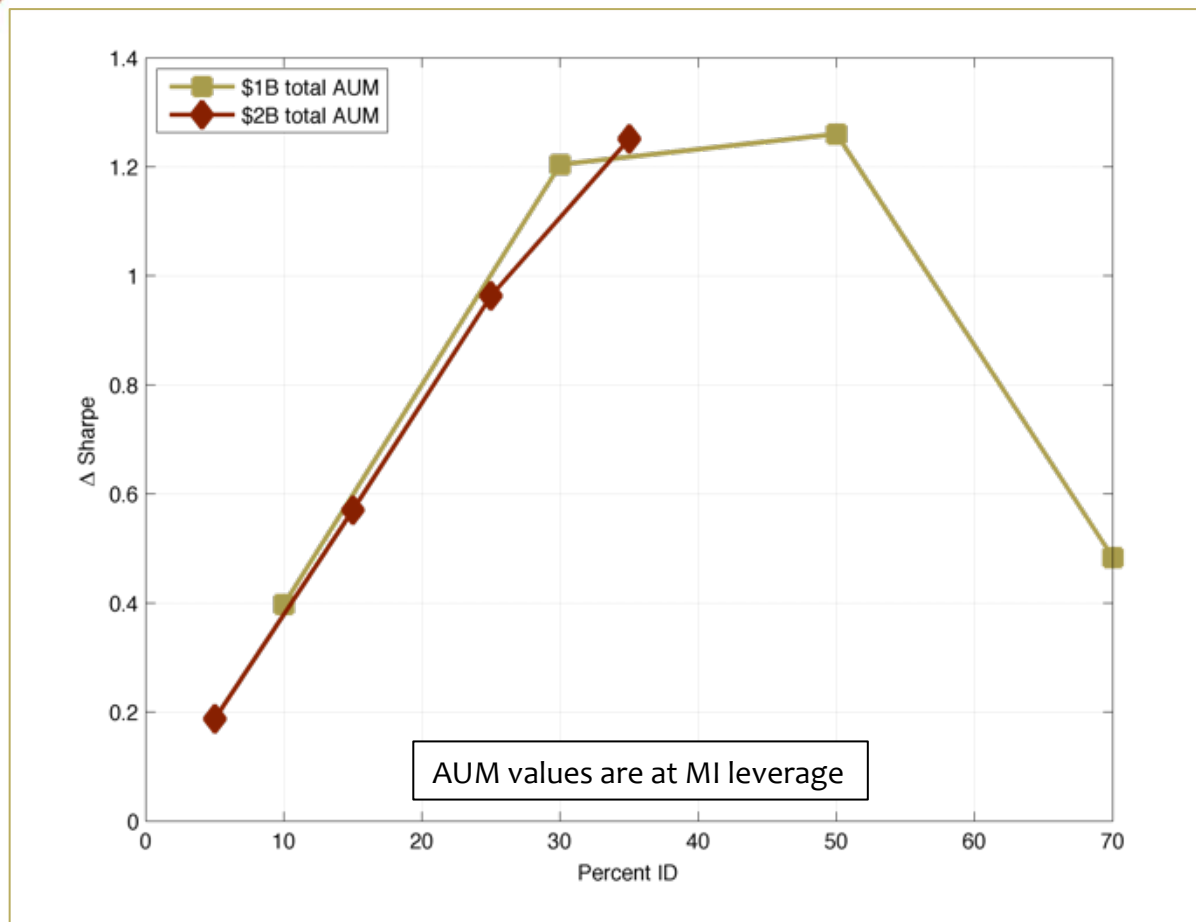


COPYRIGHT 2012 REVOLUTION CAPITAL MANAGEMENT
RCM CONFIDENTIAL - DO NOT DISTRIBUTE

INTRA-DAY STRATEGIES

- Just as with multi-day models, a variety of intra-day trading styles can be implemented.
- However, in many cases intra-day models exploit similar dynamics to those already targeted by end-of-day models.
 - Trend-following (TF) models have substantial correlation to existing TF systems.
 - High-frequency counter-trend (CT) systems overlap with end-of-day CT systems!
 - Thus, it's not desirable to simply implement the same strategy mix at higher frequencies.
- Extensive analysis has been done in order to:
 - Identify ID strategies that exploit new dynamics.
 - Select ID strategies that are maximally complementary to the existing end-of-day strategies from both correlation and risk viewpoints.

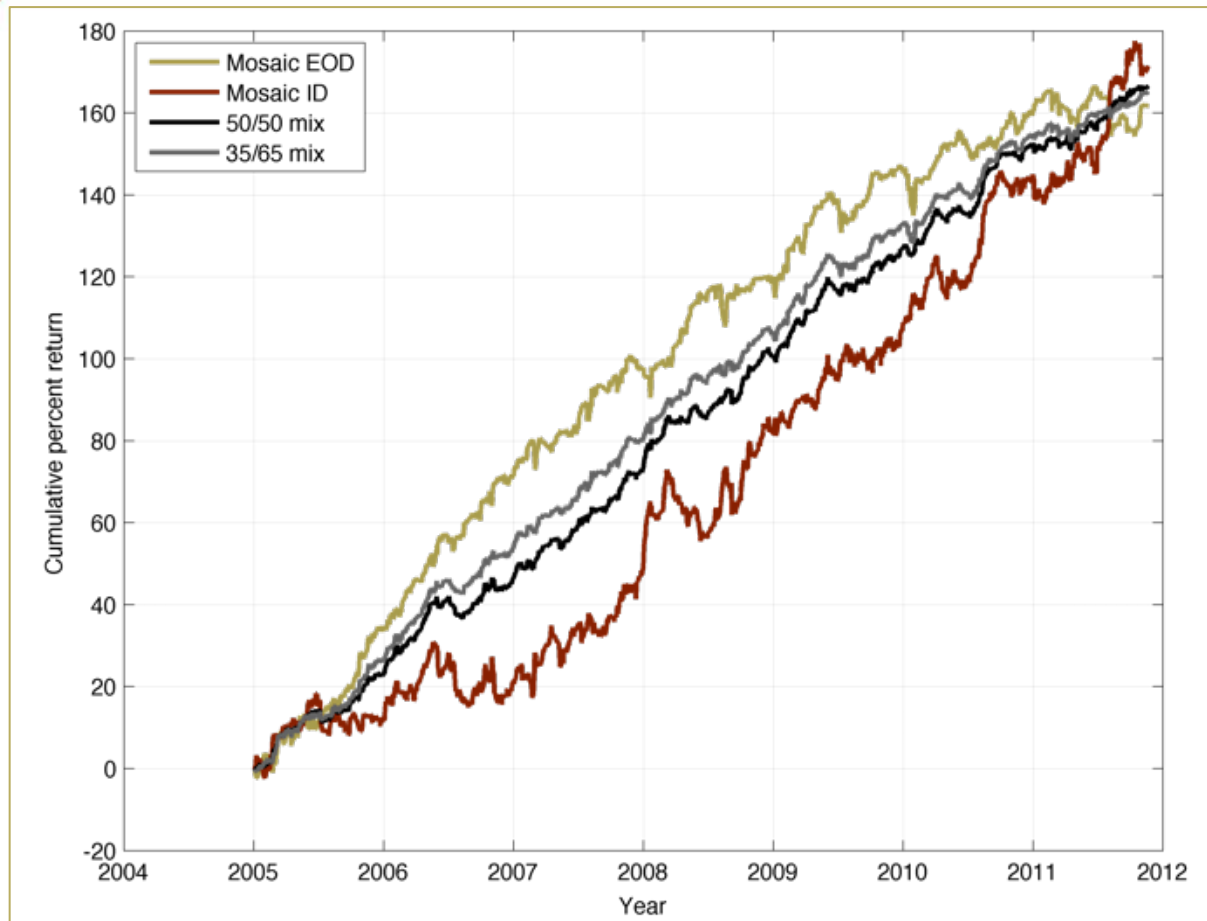
ID/EOD MIX ANALYSIS



- Maximum benefit of ID requires 30% to 50% participation (portfolio performance is maximized at a 50/50 balance)
- We believe that \$700 million is achievable for the ID strategy if we accept some size-induced performance degradation
- At \$2B total MI AUM, we can still derive near-optimal benefit of ID (since this would be 35% ID, 65% EOD)

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE PERFORMANCE.

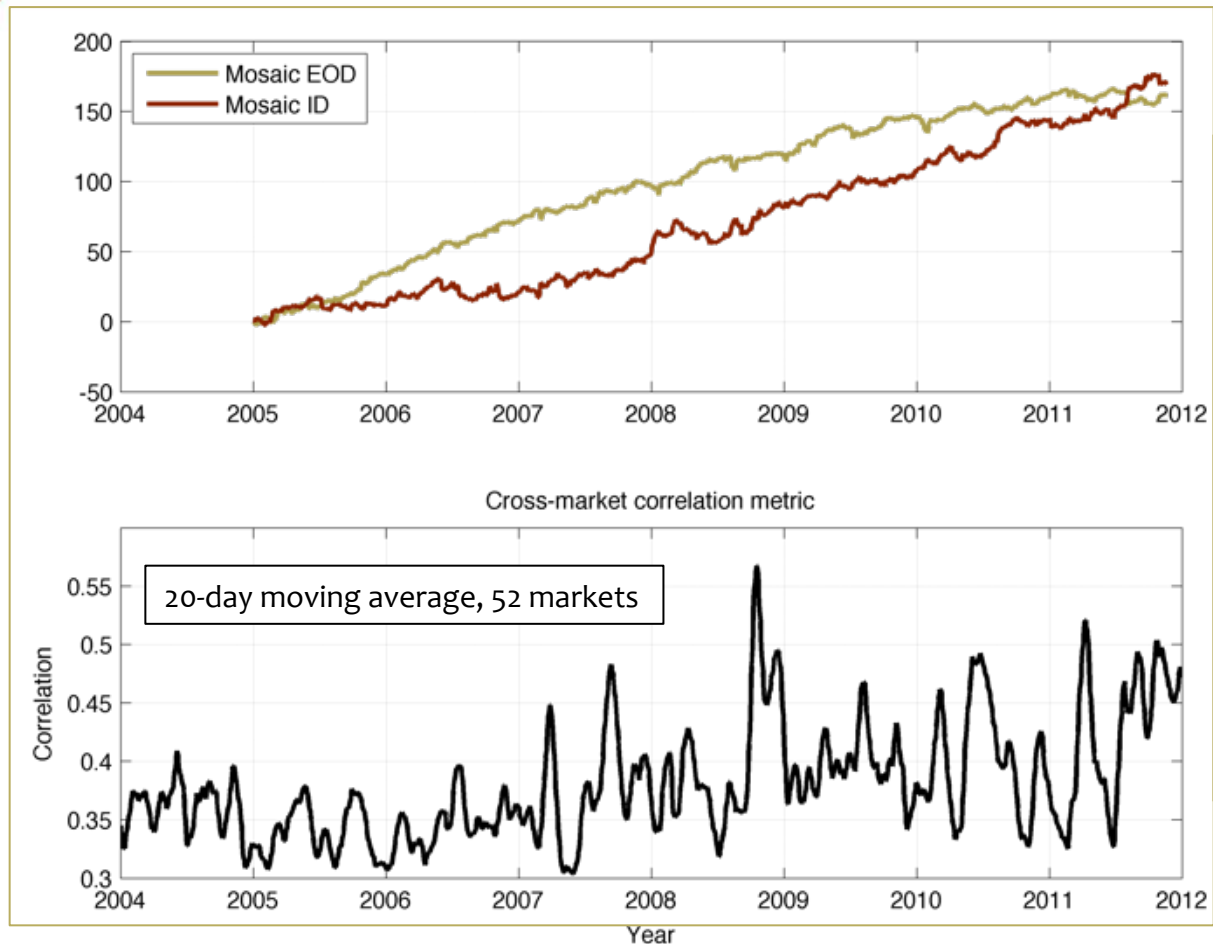
ID/EOD PERFORMANCE VS. TIME



- 2005-2007 results were above-average for EOD.
- Since the financial crisis of 2008, market shocks have increased EOD drawdown frequency and in 2010-2011 have decreased EOD returns
- Conversely, ID underperformed in 2005-2006. However, it has profitably exploited market-shock propensity in 2009-2011.
- Correlation for ID/EOD is -0.40.

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE PERFORMANCE.

THE EFFECT OF CORRELATION



- EOD prefers low, constant correlation (e.g. 2004-2006).
- EOD underperforms when correlations are high or when correlation changes rapidly.
- ID, conversely, prefers regimes where correlation is high and/or volatile.
- Note persistence of high correlation in second half of 2011.
- Higher correlation is associated with punctuated drawdowns in EOD strategies.

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE PERFORMANCE.

Section 2

Integration Strategy



INTEGRATION PLAN

- Intra-day proprietary testing has traded at \$10 million AUM at MI leverage.
- Planned starting level for ID is 1% of AUM at MI leverage, or \$10 million (i.e. equal swap of AUM from prop accounts to customer accounts).
- Final goal is ~50% of current MI AUM.
- Algo trading should enable faster ramping of ID.
- Exact timeline depends on any issues identified during milestone validations, but goal is to complete ramping within 2012.
- *End-of-day strategies will trade separately from intra-day strategies due to vastly different (and asynchronous) trading frequencies.*

MILESTONE VALIDATION PLAN

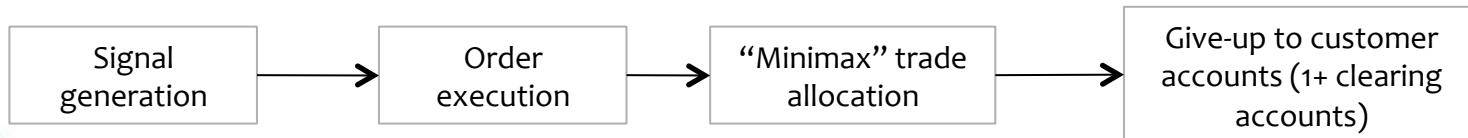
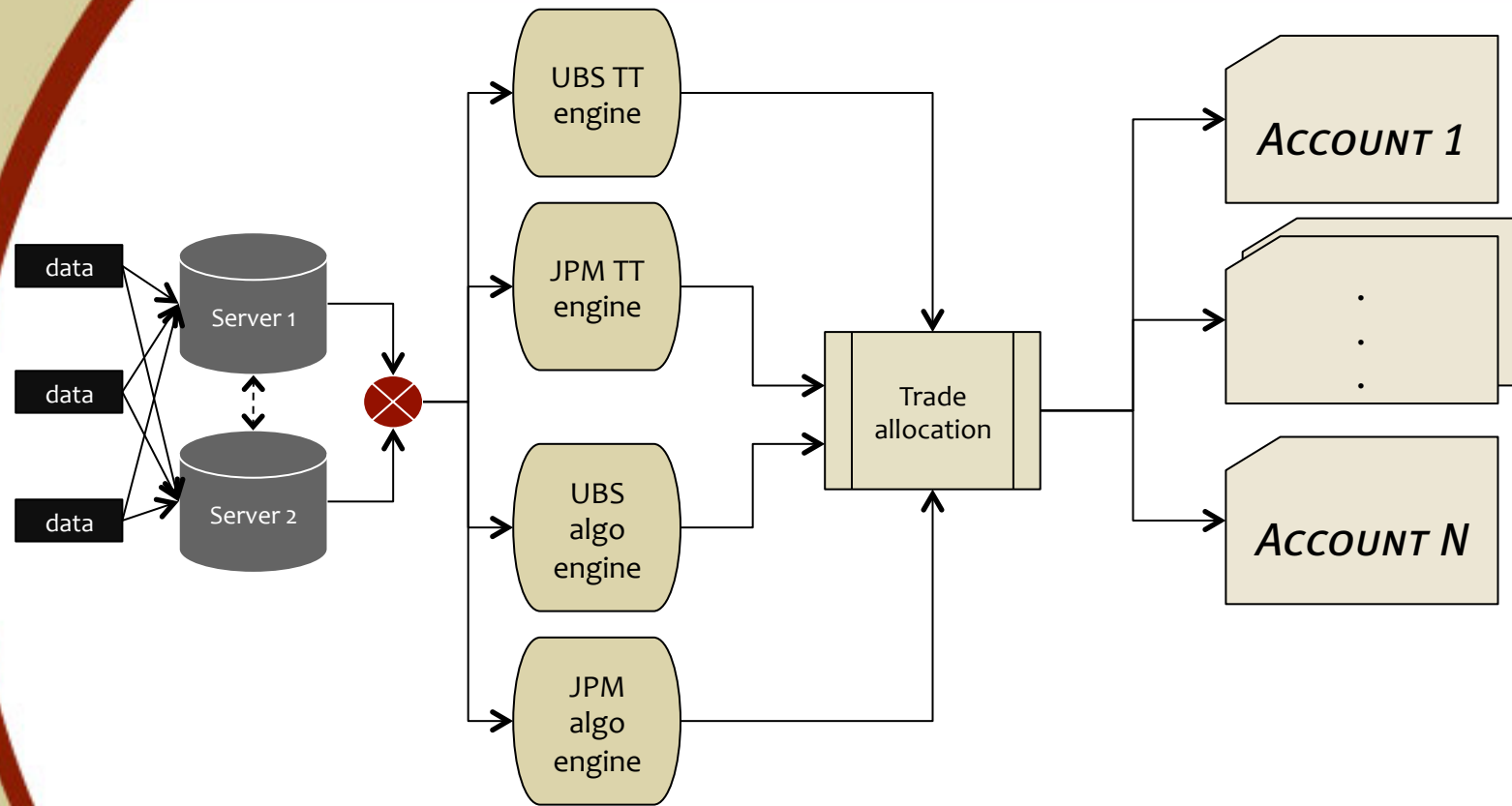
- At each discrete AUM level, a rigorous validation will be performed to ensure that system is behaving as expected.
- Validation checklist highlights:
 - Compare actual performance to modeled performance.
 - Measure slippage for every trade and compare to expectations.
 - Measure price drift within time window and compare to historical values.
 - Measure time window for every trade set and compare to expectations.
 - Assess correlation to Mosaic end-of-day system.

Section 3

Trading Infrastructure



INTRADAY PROCESS FLOW



COMPUTER HARDWARE

- Security
 - Servers are co-located at 7 Ticks in the Equinix building.
 - See Data Center summary on next page.
- Redundancies
 - Two separate servers at 7 Ticks.
 - RAID 1 and RAID 6 protocols for hard drives/filesystems.
 - Two network interface sockets per network destination.
 - Dual power supplies for each server.
 - See Data Center summary on next page.
- Failover
 - Primary: Server 1 at 7 Ticks in Chicago.
 - Secondary: Server 2 at 7 Ticks in Chicago.
 - *<non-local machines are undesirable due to latency>*

DATA CENTER (7 TICKS)

- **Security**

- All data centers are within “Top Tier Data Centers” (where the exchange servers are located).
- 24/7 Security officers, biometric access, video monitoring.
- Servers are locked in secure cabinets.
- All clients are escorted to their servers within approved time windows.
- Each client has its own secure virtual network.
- All inbound traffic must be routed through VPN tunnels.

- **Redundancies**

- Fully redundant power circuits.
- Power backup via UPS systems and generators.
- Fully redundant network hardware
- Redundant Telco paths.

COMPUTER SOFTWARE

- Protocols
 - Java, JBoss, FIX, Linux
- Security
 - VPN tunnels between Chicago/Denver (orders, monitoring) and Chicago/Florida (orders, monitoring).
 - Signal generation performed within an encrypted virtual machine.
 - Firewalls and port access restrictions used even within the VPN.
- Redundancies
 - Identical setups on all hardware instances to allow seamless failover.
 - MySQL database slaving keeps backup databases synchronized to “master”.
- Failovers
 - Follows hardware failover on previous page.

DATA FEED

- **Redundancies**
 - Three separate feeds (CQG, TT via JP Morgan, and TT via UBS).
 - TT has internal redundant failover; transparent to user.
 - Auto-failover by RCM if selected primary fails.
- **Failover**
 - Primary: TT feed via JPM or UBS.
 - Secondary: CQG feed cross-connect.

ORDER INTERFACE

- **Security**
 - Direct cross-connects within 7 Ticks, i.e. private networks.
- **Redundancies**
 - Each TT FIX API has failover to a secondary server.
 - 2 TT sessions x 2 interfaces/session = 4 options.
 - Trade limits in place at both software and FIX levels to avoid over-trade errors.
- **Failover**
 - Dual primaries: TT via UBS and JPM.
 - Random switching of orders between brokers to obscure flow.
 - If one broker fails, all traffic can be routed to other broker.
 - Dual backups: Algo interfaces are broker-specific and independent of TT.
 - Algo interfaces will become dual primaries as AUM increases.

MONITORING

- RCM has implemented multiple notification modes (email, text, audible alarms) in case of any procedural issues.
- GUI is simultaneously viewable from Colorado and Florida; this provides information on positions, orders, and feeds.
- DUNN provides 24/6 monitoring and back-office reconciliation.

SPECIAL SITUATIONS AND CORRECTIVE ACTIONS

- Missing market data
 - Failover to alternate feed(s)
 - If missing period is brief, no action need be taken. Otherwise, liquidate.
- Signal generation fails for a particular run time and market set combination
 - Independent shutdown of market until corrective action is implemented.
- Execution not complete
 - Orders are amended so that remainder is executed in next period.

SPECIAL SITUATIONS AND CORRECTIVE ACTIONS (CONTINUED)

- **Loss of order interface to market(s)**
 - Trades can be entered directly via broker algo through interactive front ends.
 - If situation persists, affected markets are liquidated until corrective action is applied.
 - As a last resort, liquidation trades can be called in manually.
- **Complete loss of trading functionality**
 - Trades can be liquidated manually via interactive front end or phone.