A TECHNOLOGY PLATFORM WITH A MATLAB BACKBONE

A Financial Engineering True Story
March 2015
A Convincing Story: Design with a purpose

The MRTL Platform is:
- Unique
- Integrated
- Scalable

The MRTL Platform pushes new Matlab frontiers:
- Architecture
- Access
- Throughput
The MRTL Platform

Multiple databases accessible from RMA, services and selected applications

Matlab backbone

client systems

external systems

internal systems

RMA services

RMA SDK

RMA Toolbox

RMA Desktop

RMA Studio

The platform’s middleware
RMA provides the computational backbone

Applications rely on pricing analytics

- MRTL internal and external systems share common pricing tools
- Selected partners provided access to real-time pricing services

Markets are processed and analyzed daily

- Commodity markets are modeled daily for portfolio valuation
- Models are used in near real-time to estimate intraday market moves
- Fundamentals and trends analyzed and summarized regularly

Research and deployment are closely connected

- Interactive Matlab analysis leads directly to computational services
- Integration with multiple data sources accelerates discovery and implementation
An Interactive Story: Seeing is Believing

DEMO:

Interactive and compiled tools illustrate the computational leverage of RMA
A Unique Story: Web Enabled Deployment

RMA is but one of the mutually supportive platform components

- All components are highly cohesive and completely integrated

Entire platform is deployed in multiple web environments

- Creates an array of access points for a broad spectrum of analytics
Platform is in production every day

- Built on computational leverage afforded by Matlab
- Accomplished using a small interdisciplinary team
- Established as a strategic asset for MRTL

Quite possibly the largest production integration of Matlab ever

- ~2400 Matlab events per day
- ~3000 CPU minutes of Matlab execution per day
- Excess of 1.5 GB of data captured or created per day