DBS introduces a vendor package application to support Treasury business
- Front Office (Traders – Sales)
- Back Office (transaction validation – confirmation – payments)
- Finance (PL production – Accounting)
- Risk (Credit – Market)

- 3 tier
- Application layer horizontally scalable
Managing growth… Driven by business AND regulators

Online  Finance  PL analysis  Risk

Did I say scalable?
While Analytics Become More and More Sophisticated

Online  Finance  PL analysis  Risk

FO models = Risk models

Used for MV, Risk and Pricing
2011… Scalability of compute nodes really is an issue.

MUREX (Online) MPC Engines

Mx Risk(Batch) MPC Engines

Mx PLVA (Batch) MPC Engines

Mx FIN (Batch) MPC Engines
2011... Scalability really is an issue

- Some environments show clear sign of contention
- Infrastructure does not scale easily
- Need to upgrade 4 environments in parallel
- High entry cost for upgrades
- Show stopper for complex models, e.g. local volatility models

- Unify the compute nodes from all environments
- Leverage the complementary workload between online and batch
- Specialize servers in compute (low memory – fast CPU)
- Use commoditized servers

- Introduce Grid computing solution – Platform Symphony
But does not look like a capacity problem

Problems:
- Each environment has its own grid
- Users and batch (Risk) at 100% capacity
- Batch environments used at night only,
- Online environment used intraday only

Approach & Opportunity:
- Form 1 single grid from 4 environments
- Utilize combined resource to “sweat” unused assets
- Implement specialized software

Combined workload & spare capacity
Building the business case

Option 1: Convince this is the right thing to do

Option 2:

- Show this is the cheapest thing to do
- Address concerns => POC – Seeing is believing

Business case:

- Address immediate scalability issues
- Give priority to traders intra-day
- Yet ensure each group retains its own capacity
- Enabler and cost saving for new model to be implemented (FXO local volatility)
Benefits

- **Day 1**

- And now:
  - Grid increased x6
  - Fully adopted… looking at next gen of enhancements…