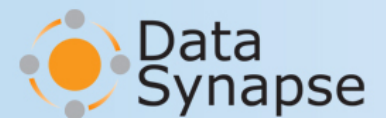


# GridServer in Financial Services

Gordon Jackson



# Company Overview

## Founded March 2000

- ❑ Blue-chip investors including Bain Capital, Goldman Sachs and Intel Capital
- ❑ Repeated industry recognition for excellence and innovation

## Worldwide Sales, Services and Support

- ❑ 200+ team members

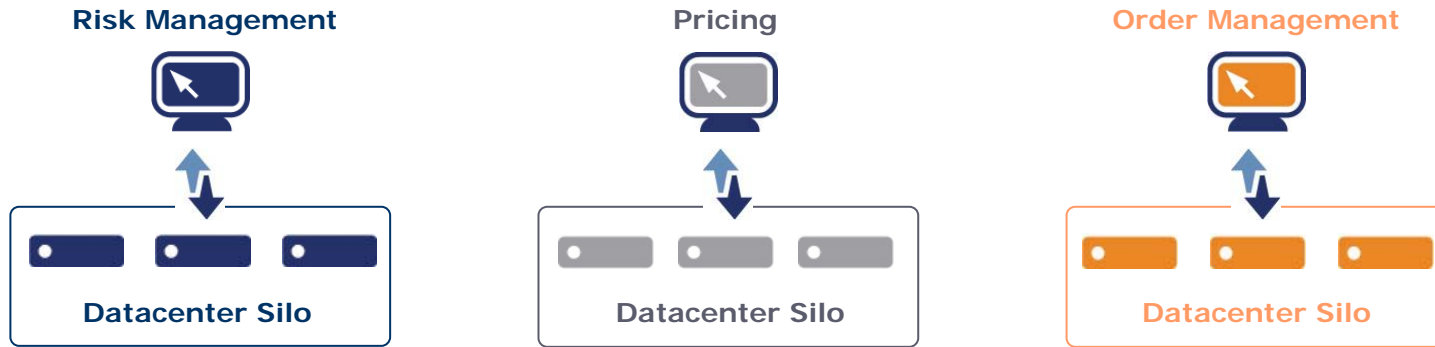
## Blue Chip Customer Base:

- ❑ Dominant market share in Financial Services
- ❑ Rapid traction in General Markets / Enterprise IT sector
- ❑ Substantial ISV partner ecosystem



- Service execution platform that dynamically scales enterprise services based on performance and business requirements
- Market-leading Grid computing technology:
  - ❑ Deployed in production in nearly 100 customers
  - ❑ Goldman Sachs deployment is approaching 20,000 engines
  - ❑ Dominant market share in Financial Services
- Proven to reduce processing time for mission critical business services

# Legacy Application Model



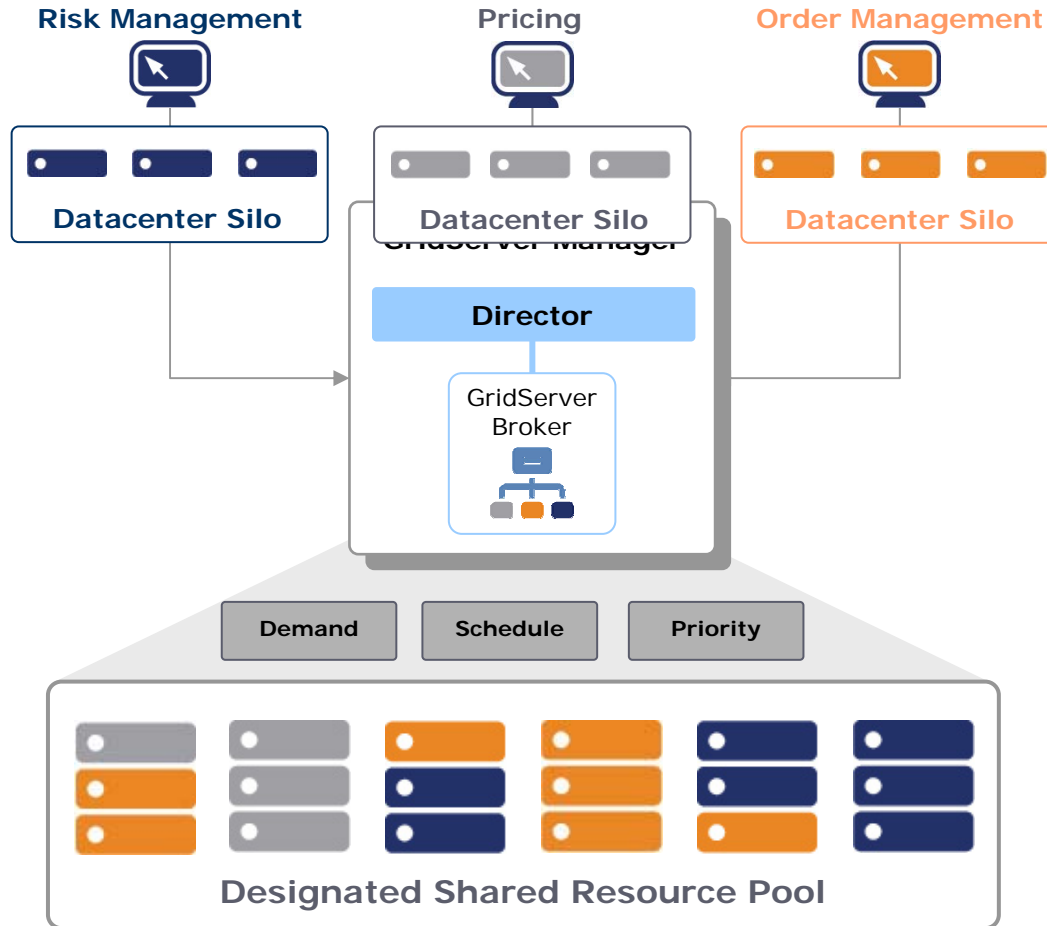
## Challenges

- Applications are bound to dedicated resources
- Customers over-provision for peak workloads, resulting in server utilization of 10-20%
- Dedicated resource allocation predefines scalability and performance

## Impacts Cost, Performance and Agility

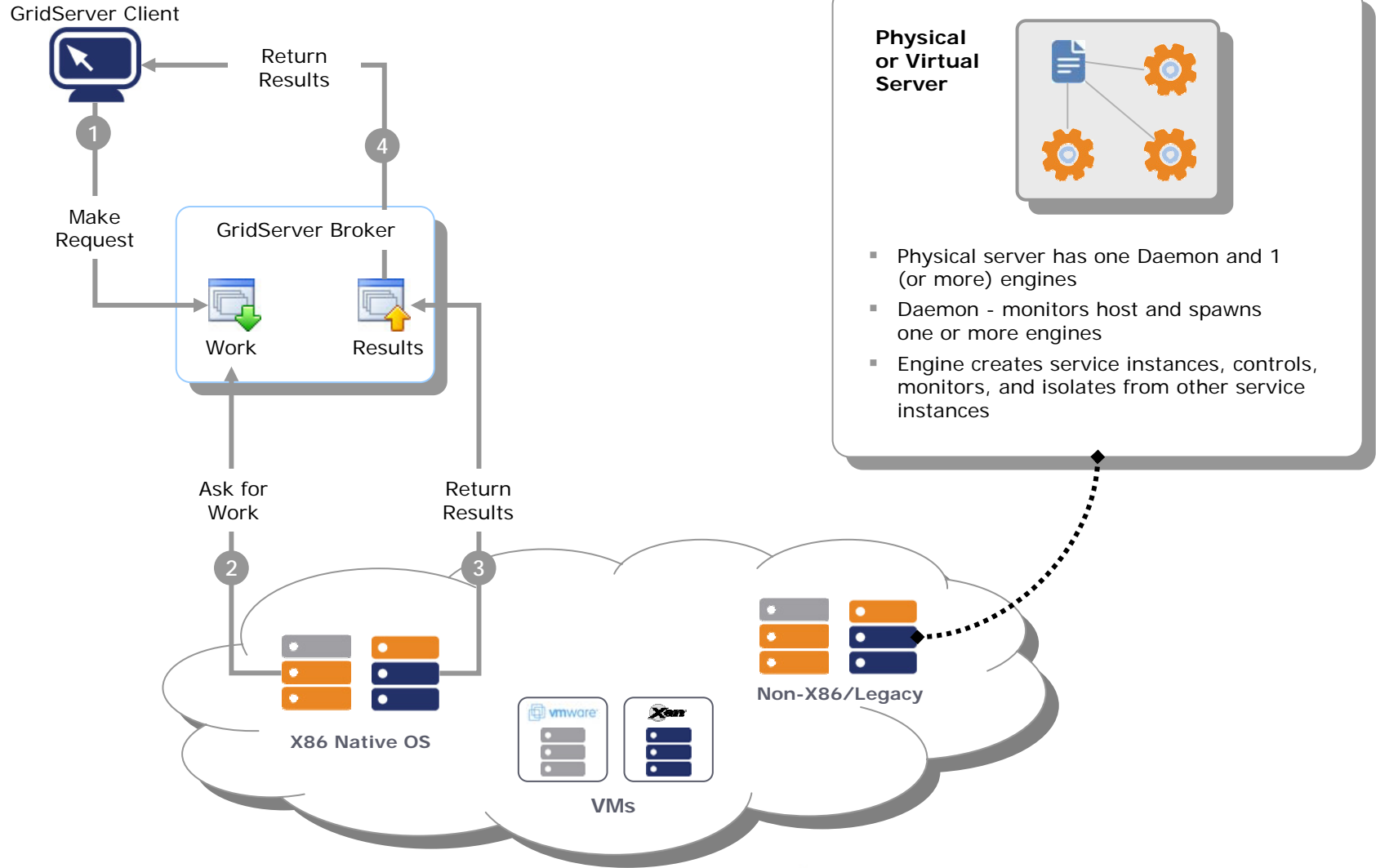
- Legacy application model drives up costs by over-provisioning and underutilizing infrastructure
- Performance challenges are difficult to address with dedicating added hardware resources
- Limit businesses ability to react quickly to market demands

# GridServer

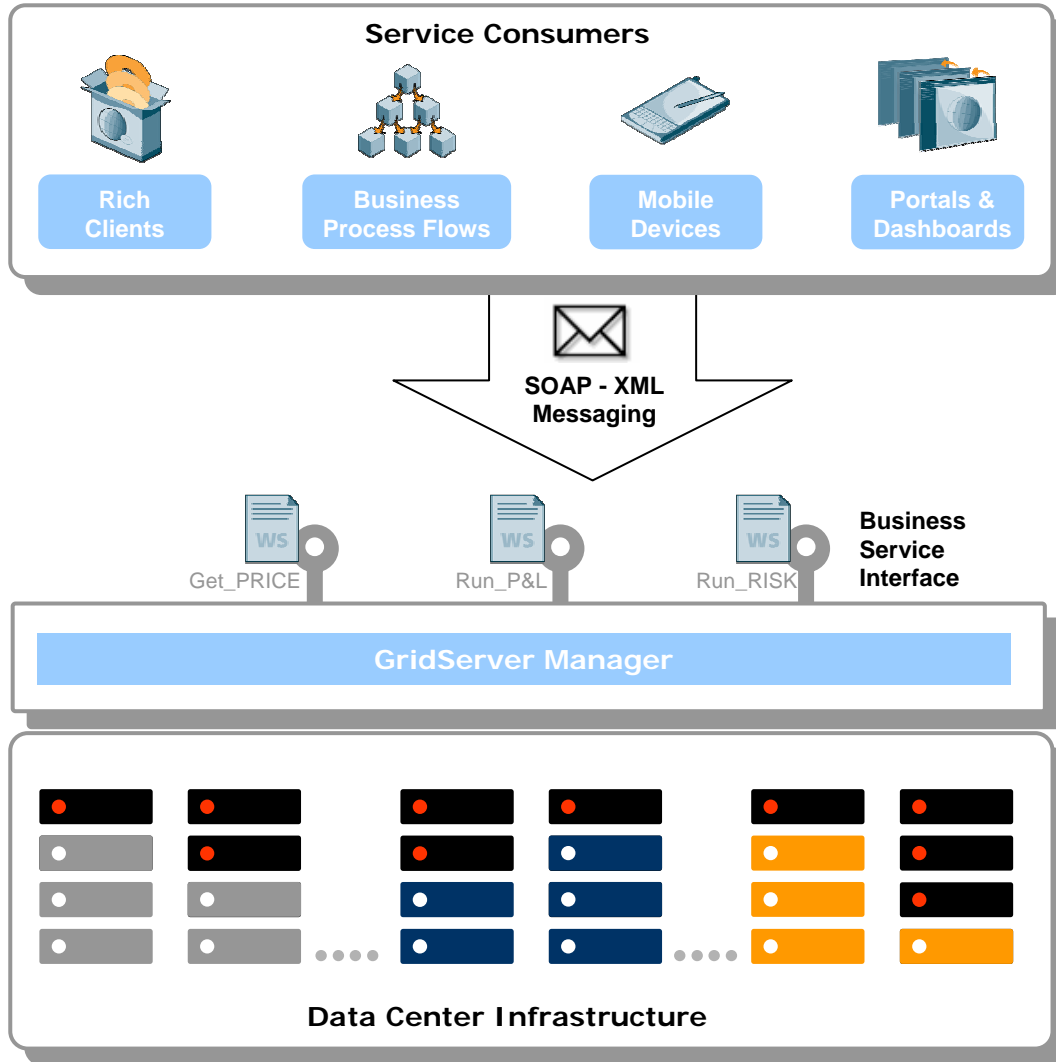


- Unbundle services from dedicated resources
- Designate a shared resource pool
- Automatically allocate resources to enterprise applications

# GridServer: How it Works



# SOA Service Execution Platform



## SOA Service Clients

- Support for any type of SOA Consumer / Client: Web apps, Rich Clients, Mobile Devices, Process Flows and Orchestrations

## Support for Web Services Standards

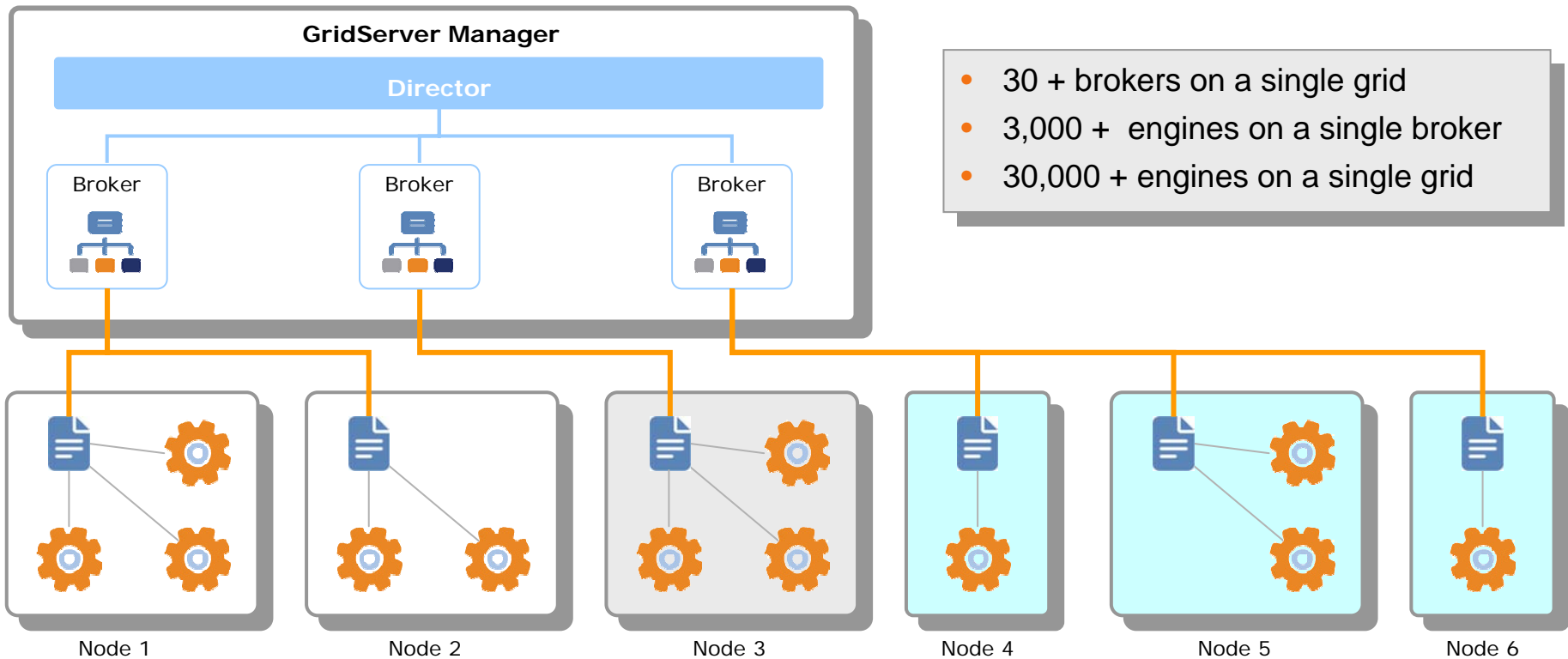
- Support for WS-I Basic Profile
- Support for WSDL standard for defining interfaces
- Support for SOAP, standard XML message format for Web services

## Service Enablement

- Service-enable legacy applications simply and easily
- Automatic recovery of service execution in the event of hardware failure
- Unparalleled Performance and Scaling

# Performance and Scaling

- Services can be scaled to meet performance or SLA demands
- Execution of online parallel transactions delivers the greatest flexibility and scalability
- Service availability delivers unparalleled horizontal scalability





# Key Features

## Dynamic Scaling of Services :

- ❑ GridServer can configure, start, and manage services based on schedule, policy, or priority

## Unparalleled Performance :

- ❑ GridServer can dynamically scale services to meet SLA targets
- ❑ Performance metrics are tracked and triggers can activate additional application instances

## Availability:

- ❑ Guaranteed Service Execution – even if the hardware fails
- ❑ Automatic failover and failback of services

## Centralized Command and Control:

- ❑ GridServer simplifies the configuration and management of running multiple services across widely distributed resources

# Exotic OTC Derivatives

## Problem:

- Single trade pricing taking 1.5 to 2 hours
- Competition pricing in 5 minutes



## Solution:

- Re-engineered application – 8 months
- GridServer enabled the application – 1 week
- Started with grid of 60 engines - now have 1,000+

## Benefits:

- Pricing in seconds
- “End of Day” reduced from 14 hours to 30 minutes
- Ability to offer “on demand pricing” has given them the edge over competition

# Online Self-Service Portal

## Problem:

- Global HR Outsourcing firm with self-service portal
- User requests jumped from 50,000 to 200,000
- High volumes strained IT systems; mainframe environment could not provide timely response

**Hewitt**

## Solution:

- GridServer implemented in months
- Offload pension calculations from mainframe to Linux blades

## Benefits:

- ↑ 5x volume capacity
- ↑ 50% improvement in SLAs
- ↓ 90% reduction in transaction costs

# Fixed Income Pricing / Microsoft Excel

## Problem:

- Performance issues on complex fixed income products: exotic equities, hedging portfolio



## Solution:

- GridServer deployed to scale Microsoft Excel and improve application performance

## Benefits:

- Trade pricing and risk analysis went from 15 hours to 10 minutes
- Ability to offer “on demand pricing” significantly enhanced competitive advantage

# Capacity Challenges

## Problem:

- Capacity challenges for actuarial projections, risk management, cash-flow projections and product pricing



## Solution:

- Desktop grid for stochastic analysis; runtimes reduced from 81 days to 81 minutes and 36 days to 26 hours
- GRIDesign identified opportunity for expansion; Nationwide now moving to enterprise grid

## Benefits:

- Improved accuracy of risk management reduced capital reserves
- Ability to consolidate platforms boosts IT efficiency; projected IT savings >\$30M over 3 years
- Increased volumes for handling claims

# Analytics and Risk Calculations

## Problem

- Compliance and regulatory pressures strained legacy actuarial apps (SS&C, Milliman)
- Objective to improve analytics and risk calculations



## Solutions

- GridServer implemented on desktop grid, retiring farm of 10 Solaris servers
- GRIDesign identified core apps; Genworth deploying enterprise grid with 1000s of nodes

## Benefits:

- SLAs improved by 40x
  - Policy valuation reports went from 28 hours to <90 mins
- Reduced employee turnover by 80%
- IT cost reductions/avoidance of \$15M (purchase of Sun E15Ks)

# Fixed Income Analytics

## Problem

- Long-running, overnight batch for CMOs and more comprehensive, detailed analytics
- Wanted more complex instruments and intra-day analysis

## Solution

- Implemented GridServer

## Benefits:

- ❑ 18% reduction in IT spend per year
- ❑ \$10MM increase in revenue per year
- ❑ 10x improvement in SLAs



# Testimonials – Financial Services



"We're seeing 10 times or more improvement to cycle time... **I think it would be very difficult for a CIO to find a technology and an application that has the payback that grid does.** The cost is so low and the benefits are so high it can't be ignored."



"With GridServer, we've generated new business opportunities, reduced cycle times, and enabled greater transaction capacity, all driving revenue growth. **Grid computing is making us money, period.**"



"Moreover, our group is trading 4x more volume and we have increased our modeling simulations by 25x on the GridServer software platform. We are booking larger, more exotic, and more lucrative trades with more accurate risk-taking - **DataSynapse helps us make more money, period.**"



"Toronto Dominion is expanding the use of its global computing grid by allowing more of its legacy credit derivative pricing applications to access the shared computing resources of the firm... **The grid enables the bank to do things that were previously beyond its reach.**"



# Testimonials – Enterprise IT / Commercial Markets



**On the Grid, Hewitt reduced its transaction costs by some 90 percent, without rewriting their applications.**

"Everything we do on the grid comes up the same or substantially faster than on the mainframe alone. We could throw 100 blades into the grid without reconfiguring substantially. There's no cluster you can do that with."



Grid-enabling SunGard analytics "provides Powerex the tools for real-time decision making and we're pleased by the reduction in compute time it achieved. It is now possible for Powerex to run its VaR reports intraday, **making real-time decision making a reality...GridServer will help change how power marketers do business in the time-critical energy market.**"



"Telefónica's fixed and mobile telephony businesses will quickly and efficiently realize the **benefits of a service-oriented architecture (SOA), delivering optimized application performance and resource utilization** which will guarantee higher service levels and application resiliency."



"A seamless interface with DataSynapse helps Informatica provide customers with a **single, unified and open enterprise data integration platform** delivering near-universal access to all enterprise data and unparalleled scalability, availability and performance ."

Gordon Jackson

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***Thanks!***

For more information go to [www.datasynapse.com](http://www.datasynapse.com)

