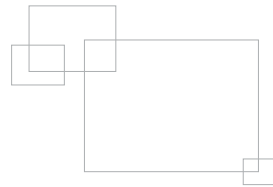


Enterprise Grid Solutions  
for Financial Services

## Platform Symphony



# Challenges in Financial Services



Today's financial services firms are under increasing pressure to grow revenue and market share amidst intense competition, regulations, and the growing need for enterprise risk management. At the same time customers are struggling to lower the total cost of ownership of resources, increase operating efficiency – and be faster, more agile and adaptive to changing business demands.

Pricing, Value-at-Risk, Stochastic modeling, Monte Carlo simulations need to be executed in real time. Risks need to be computed across the enterprise, across portfolios, across Lines of Businesses – requiring massive computational power, working with multiple applications, and faster application runtimes.

The traditional approach of throwing additional hardware at the problem doesn't cut it any more. A second approach of deploying siloed compute-clusters based on commodity hardware is also proving not to be an ideal, long-term solution – as capital costs are reduced but often at the expense of increased operating costs and reduced reliability.

Grid computing solutions from Platform Computing allow forward-thinking financial services firms to easily move to a true grid environment where multiple users and applications share compute resources – hardware and software licenses – in virtual pools that dynamically adjust and scale based on the priorities and needs of the business.

## Platform Computing customers enjoy the following benefits:

### Increased Revenue

Platform Computing customers report how Platform Symphony is helping their top-line.

1. Run applications orders of magnitude faster, allowing them to make faster business-critical decisions – ahead of their competitors.
2. Build and test grid-ready applications independently of the underlying grid infrastructure – leading to faster time to market.
3. Our customers cite transformational opportunities through new products and new ways of doing business that just weren't possible before deploying Platform technology.

### Lower Total Cost of Ownership (TCO)

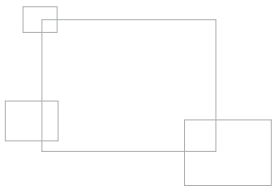
Platform Computing customers report how Platform Symphony is helping their bottom-line.

1. Customers report significant increase in server and cluster utilization – leading to reduced costs. And, as more applications and users migrate onto the grid, the cost savings continue to grow exponentially.
2. With the Platform grid computing solutions, customers report a more reliable infrastructure, with their applications always up and running – preventing business loss due to application downtime.

“We achieved time savings of 80 percent in our risk management processes”.

Dr. Peter Oellers, LBBW





“We have been able to reduce a 2.5 hour job to 10 minutes, and an 18 hour job to 32 minutes...”

Keith Medley, RBC Insurance

## Ideal Segments for Grid Adoption

### Capital Markets

The bar is always rising. Volumes are increasing; products that were once considered exotic are now standard. Market and credit risk simulations that the business required once a day are now required once an hour and sometimes even pre-deal. And assumptions once standard in the market are being relaxed making simple closed form solutions obsolete.

Capital markets firms that can apply compute power when needed, as needed to the pricing and hedging of derivative securities can bring products to market more quickly, price these products more accurately, and can react with greater agility to shifts in the market.

### Insurance

Insurance firms are driving towards stochastic approaches to price and assess the reserves and capital for many of the more complex liabilities. In many cases regulators are mandating the move; in other cases it's the business that wants to more accurately understand the tail-risk in products like variable annuities. In order to perform these calculations across millions of policies, thousands of scenarios, and over the life of the policies is a daunting task requiring immense amounts of compute power.

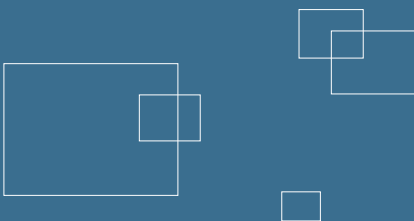
By distributing these calculations across a virtualized pool of managed resources, a grid computing solution from Platform Computing can dramatically accelerate calculations that once took days down to minutes. This increase in both the accuracy and frequency of calculations improves the pricing of new products and is capable of reducing the risk capital required to support these products. This can lead to millions of dollars in savings.

### Retail Banking

Retail Banks increasingly see themselves as marketing managers locked in a struggle of customer acquisition and retention. To increase revenues and profitability, they need to efficiently match the right products with the right client in a timely and accurate fashion.

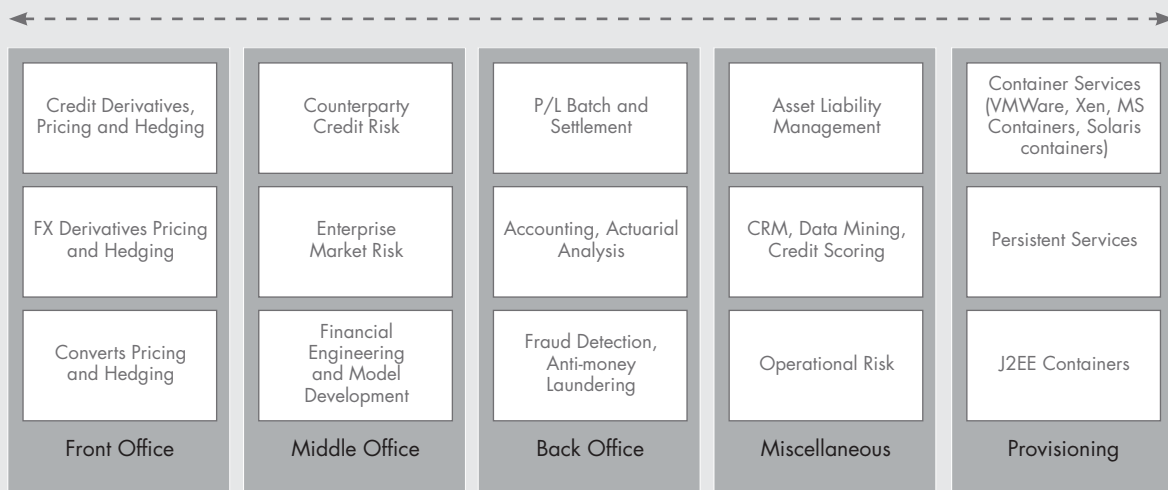
However, retail banks are hampered by the sheer quantity and complexity of their data. The advanced analytics, database tools and predictive modeling required to make sense of this dirty data, then present it in a form that is useful for marketing requires significant amounts of compute power.

With a grid computing solution from Platform Computing, retail banks can process more data quicker and more effectively leading to better decisions and ultimately higher profits.



### Real-time Apps (inter-day)

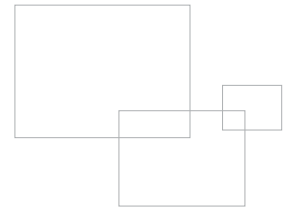
### Batch Apps (intra-day)



Platform Computing Grid solutions: Ideal for Financial Services

# The Solution: Platform Symphony

Faster business results, more competitive advantage



Ideal for mission-critical real-time environments, Platform Symphony is an enterprise grid software to solve pricing and risk problems. Built on Platform EGO, Platform Symphony allows you to build, test, grid-enable, and manage application services on a highly fault-tolerant, shared, scaled-out infrastructure.



## Faster Speed to Value

Platform Symphony enables you to make faster business results, allowing you to close deals faster, launch new products faster, and stay ahead of your competition. With Platform EGO as the foundation, Platform Symphony is the industry's most robust, scalable and reliable grid solution, delivering speed-to-value with unparalleled application performance, and guaranteed policy-driven execution of application services.

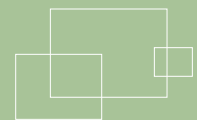
In addition, with Platform EGO you can run multiple applications on the same grid, share resources across multiple applications, and yet have the flexibility to upgrade one application without impacting the other.

## Increased Business Flexibility

Unique to Platform Symphony, is the Symphony Developer Edition (DE), the first and only solution tailored for developing SOA and Grid ready applications. With Platform Symphony, application developers and LOBs (lines of businesses) have the flexibility to build and test applications without involving IT, and then deploy them on the EGO grid without any additional code changes.

## Increased Reliability

While reliability may not be the primary driver for considering a grid solution, it is nonetheless a key requirement for mission critical businesses. IT organizations can leverage Platform Symphony's resilient and fault-tolerant architecture to provide seamless business continuity by virtualizing development, production, and disaster recovery centers spanning across geographies.



“With Platform software, compute jobs that previously took up to an hour to run now only take 15 minutes. We now have better performance and a more reliable system.”

Peter Hehir, Deutsche Bank



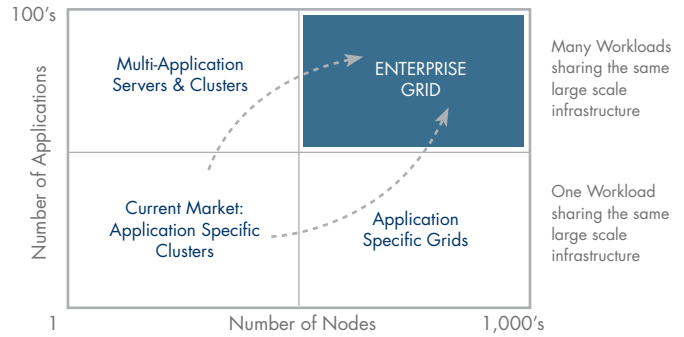
# Enterprise Grid

## Evolving the Enterprise Architecture

To achieve business agility, forward-thinking organizations are rapidly moving towards a service-based paradigm. With the new paradigm, enterprises are more adaptive to market demands and can achieve lower TCO.

Monolithic applications are replaced with business processes. New business processes are dynamically constructed on top of established business services. Service Oriented Architecture (SOA) provides a repeatable connectivity blue print for the new agile enterprise. Platform technology seamlessly adds Grid capabilities to SOA-based applications. Platform EGO extends the service-oriented paradigm to compute resources and delivers enterprise level Service Oriented Infrastructure (SOI).

This next generation Platform Symphony architecture, with Platform EGO inside, is the industry's most agile, scalable, reliable and business responsive solution for mission-critical financial services customers.



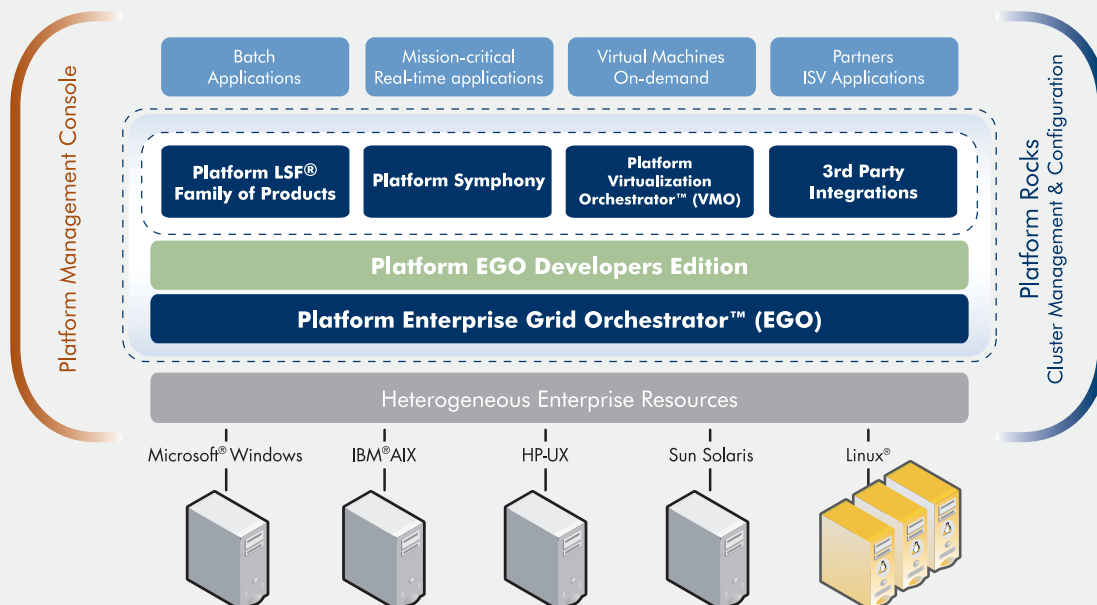
“Taking into account all areas of savings, the compute backbone (Powered by Platform Symphony) has taken easily 20% out of the compute-cycle costs.”

Adrian Kunzle, JPMC

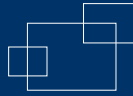
# Platform Enterprise Grid Orchestrator™

## Enabling the Enterprise Grid

Core to Platform Symphony is Platform Enterprise Grid Orchestrator (EGO), the first and only grid platform that will deliver the power of virtualization, automation and the sharing of all IT resources to every application type. Platform EGO provides a flexible way to orchestrate multiple applications into a single, cohesive, efficient system. By de-coupling resource management from workload management, Platform EGO can effectively allocate, prioritize and manage the supply of resources with business policies across the enterprise. This functionality provides organizations the ability to scale up and scale out, while improving application performance, resource utilization and achieving better SLA management overall. Platform EGO leverages 14 years of grid leadership into the enterprise comprised of hundreds to tens of thousands of CPUs.



# Platform Management Console



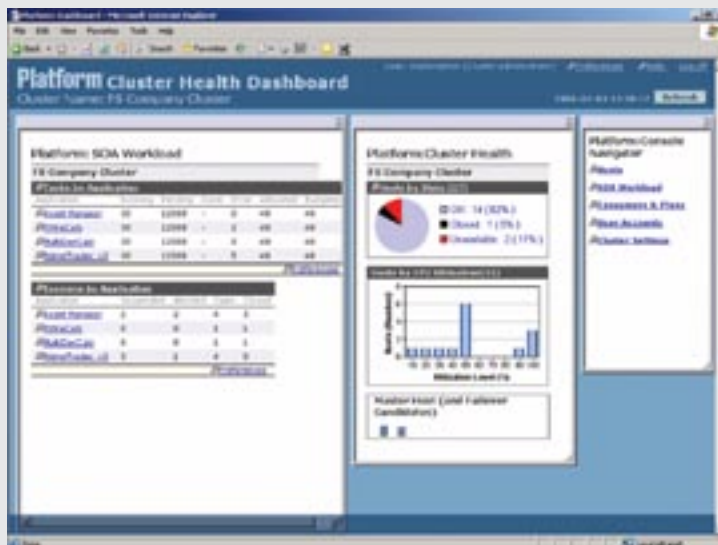
Common web-based console for Platform EGO™ administration & management, as well as other Platform products built on Platform EGO, including Platform Symphony and Platform VMO™.

## Ease of Management

Platform's web-based management console allows you to easily view, customize, manage, monitor, and request SLA (Service Level Agreement) based resources on-demand. And with the ability to integrate with your existing systems management interface, additional savings support and services can be realized.

“Also a priority has been lower cost of supervision and management which has meant both increased ease of administration and cost effectiveness.”

Alain Benoist, CIO – Société Générale



Easy-to-use Status Dashboard

## Comprehensive Application / Standards Platform Support

Platform Symphony is engineered to support the widest range of application types including:

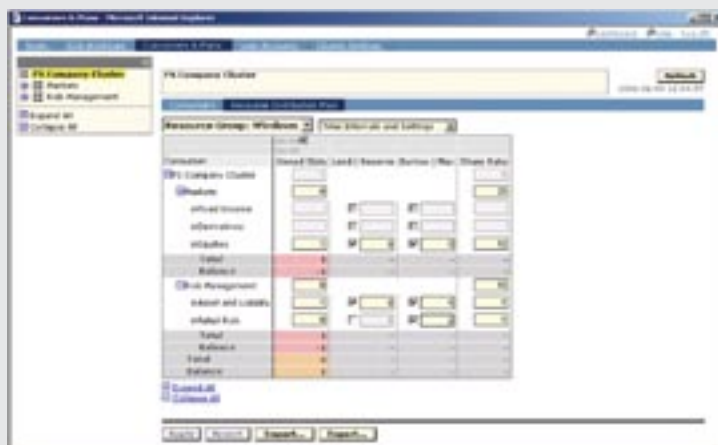
- Service-Oriented Architecture (SOA)
- Batch
- High Performance Computing (HPC) – Message Passing Interface (MPI)
- Microsoft® .NET
- Java / Java 2 Platform, Enterprise Edition (J2EE)
- Java Message Service (JMS)
- JCache
- C/C++

In addition, Platform Symphony supports all major commercial and homegrown applications.

### Standards Support

Platform Computing continues to demonstrate its commitment to standards-based computing through its ongoing support for:

- GGF – Global Grid Forum
- OGSA / OGSI - Open Grid Services Architecture/Infrastructure
- Globus - In addition to the base set of components and services available in GT3, Platform Globus Toolkit includes significant extensions based upon the Community Scheduler Framework (CSF) that drives grid accessibility.
- WS-RF - Web Services - Resource Framework



## Ownership with sharing

Unique policy-based lending & borrowing of resources



## Grid Benefits without Compromising System Integrity, Security or Control

Platform Symphony delivers all the benefits of Enterprise Grid without adversely impacting your existing applications, compromising current hardware, architectures, security mechanisms or locking you into proprietary IT systems.

- Requires no significant reengineering of existing processes or systems
- Easily integrates with leading ISVs for maximum flexibility
- Compatible with all major hardware platforms, operating systems and programming languages
- Compliant with emerging open, standards-based architectures

## Low Risk Deployment and Operation

### Professional Services and Support

Platform Professional Services is an expert consulting group that guides clients and partners through the planning, building, and implementation of grid solutions designed to align IT in order to meet the business objectives. Using a proven methodology, Platform Professional Services effectively plan, build, run and manage end-to-end grid solutions designed for your existing infrastructure, customized to meet your specific needs today while planning for tomorrow.

Furthermore, expert and responsive product support is available 24x7 by a dedicated team of support professionals.

## Financial Services Partners

Apple  
Dell  
Fujitsu  
HP  
IBM  
Infosys  
INTEL  
Microsoft  
NEC  
RedHat  
SAS  
Sun Microsystems  
TopSpin/Cisco Systems  
Wipro



## Financial Services ISVs

Algorithmics  
Application Networks  
Aspeed  
Calypso  
Codefarm  
Gemstone  
Genalytics  
GGY  
Mathworks

Numerix  
Tillinghast  
iMAGINE  
Misys  
Murex  
Netegrity  
Sungard  
Sophis

## Financial Services Customers

BNP  
Blue Cross Blue Shield  
Citigroup  
Deutsche Bank  
Ernst & Young  
Fidelity  
Fortis  
I-Behaviour  
JapanPost  
JP Morgan Chase  
HBK Investments  
Horizon Energy

HSBC  
Landesbank Baden-Wuerttemberg (LBBW)  
Lehman Brothers  
Mass Mutual  
Millennium Partners  
MUFJ  
Prediction Company  
Royal Bank of Canada  
Sal Oppenheim  
Société Générale  
Wells Fargo





# Platform™

## ABOUT PLATFORM COMPUTING

Platform Computing is the global leader for grid computing solutions and a technology pioneer of the supercomputing world. The company's solutions for enterprise and high performance computing helps the world's largest organizations integrate and accelerate business processes, to increase competitive advantage and enjoy a higher return on investment from IT. With over 2,000 customers, the company has achieved a clear leadership position in the market through a focus on technology innovation and execution. Founded in 1992, Platform Computing has strategic relationships with Dell, HP, IBM, Intel, Microsoft, Novell and Red Hat, along with the industry's broadest support for third-party applications. For more information please visit [www.platform.com](http://www.platform.com).

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