

AUTONOMOUS CLOUD SCALING AT A FINANCIAL ORGANIZATION

HYBRID CLOUD



CONTROL

Takes advantage of cloud capacity while managing scaling



RELIABILITY

Prevents service outages that can be damaging to the business



INSIGHT

Users can monitor and adjust key system metrics through an easy-to-use dashboard



SAVINGS

Helps eliminate over \$100 million in IT investment consolidation costs

Optimizing Scaling for Business Growth

The Company is a major global mutual fund and financial services organization, managing retirement funds, stocks, and other services for tens of millions of individuals, employers, and firms.

The Company relies on a backend mainframe to support its business. The enterprise's systems undergo substantial spikes in load each day as the trading market closes.

To better handle these usage spikes, the Company implemented a solution that could horizontally scale application loads at set times while also accommodating unplanned spikes at other points in the day.

If mainframe licenses and resources are left unmonitored and unmanaged, the system's attempts to meet spikes in demand have the potential to overwhelm the mainframe with too many connections to the organizational database. An outage of this key system would cause substantial damage to the enterprise.

To further complicate the issue, the Company has various classes of applications. The amount of resources dedicated to these applications is prioritized based on their class.

Complex rules define which high-importance applications must remain live at all times and scale at the expense of other applications.

If the Company could find a way to autonomously handle cloud container scaling based on mainframe capacity requirements, it could realize over \$100 million in savings. But this would require optimizing financial and business strategies to better support mainframe capacity requirements. Such measures would empower the overall enterprise while maintaining and growing underlying systems.

If the Company could find a way to autonomously handle mainframe requirements and cloud scaling, it could realize over \$100 million in savings. But this would require optimizing financial and business strategies to better support mainframe capacity requirements. Such measures would empower the overall enterprise while maintaining and growing underlying systems.

About the Company

- ▶ A major global mutual fund and financial services organization
- ▶ Manages retirement funds, stocks, and other services for tens of millions of individuals, employers, and firms

Business Challenges

- ▶ Relies on a backend mainframe, with systems undergoing major load spikes each day as the trading market closes
- ▶ Unmonitored scaling can overwhelm mainframe connections, taking it offline

Solution

- ▶ An autonomous scaling solution that runs in the Company's private cloud, managing incoming traffic and mainframe connections based on complex rules and metrics
 - ▶ A dashboard provides insight into scaling metrics and thresholds, letting users adjust them as needed
 - ▶ Increases overall availability, stability, and resilience of the environment, helping the Company eliminate the over \$100 million cost of consolidating IT investments
-

An Intelligent Cloud Scaling Solution

To meet the Company's goals, it needed a solution that horizontally scales the environment by producing new instances of the organization's cloud components, enabling capacity to rise and fall on demand.

This would be performed based on defined, complex rules and metrics regarding outline timeframes, maximum application copies, and mainframe connections, and beyond. For example, the solution would not scale down during trading hours, and scaling would occur based on the number of connections it has been allocated by backend systems.

The Company engaged Prolifics to design an autonomous scaling solution running in the Company's private cloud. It answers these key requirements, managing both incoming traffic on the frontend and mainframe connections on the backend.

Once the system verifies that enough resources are available to prevent the scaling process from causing problems elsewhere in the environment, it effects the necessary scaling to keep applications running according to the policy, smoothing the overall resource requirements curve.

The solution collects statistics, monitoring both overall system health of the cloud and the containers, as well as scaling rules. Adjustments are made as needed.

A dashboard provides insight into mainframe connections, application consumption, mainframe consumption, and transaction throughput. Users can view and revise scaling metrics and thresholds through this dashboard interface.

Reduced Costs, Enhanced Benefits

The autonomous cloud scaling solution helps increase the overall availability, stability, and resilience of the Company's environment. It offers better resource availability within the mainframe. Database connections for higher-priority applications are scaled up at the expense of lower-priority applications when necessary. Using the solution, the enterprise can take advantage of reduced costs while ensuring business metrics are maintained.

The Company's mainframe costs hundreds of millions of dollars a year to support, and expertise in mainframe technology is rapidly aging out of the industry. Optimizing its use of the mainframe reduces organizational risk and aligns with the business's \$100+ million initiative to reduce its mainframe investment (and overall IT expenses) going forward. The solution helps recoup much of this cost, helping provide an immediate return on investment.

ABOUT PROLIFICS

Prolifics creates a competitive advantage for organizations around the world by implementing customized, end-to-end IT solutions that achieve business success, leveraging leading technologies in a global delivery model. For more than 40 years, the company's technology expertise, industry-specific insights and certified technology accelerators have transformed organizations around the world by solving complex IT challenges. For more information, visit www.prolifics.com.



P: 818-582-4952 | E: solutions@prolifics.com | W: Prolifics.com