

# JUNIPER NETWORKS SOLUTIONS SUPPORT MIFID AND REG NMS COMPLIANCE REQUIRED OF FSI'S

## Challenge

Reg NMS and MiFID will open up the network performance of American and European FSIs to scrutiny by auditors and customers alike. Customers will naturally prefer faster performing organizations.

## Solution

Juniper Networks delivers high-performance routing, networking, and security solutions that provide full functionality without performance degradation.

## Benefits

- Low latency solutions improve network speeds
- WAN optimization overcomes latency and contention
- Security and performance for multicast traffic
- Deep Inspection at speed

The Markets in Financial Instruments Directive (MiFID) and Regulation National Market System (Reg NMS) are two developing regulations that impact the way trading operations in Financial Services Institutions (FSIs) are managed and changed. Both regulations require FSIs to deploy robust trade execution and order handling applications, and ensure that accurate information is available in a timely manner to provide best execution for their customers. Furthermore, the timely and accurate execution of buy and sell orders needs to be monitored and documented. Organizations must consider and implement multiple strategies to ensure the high performance and availability of their networked applications, while controlling compliance costs and avoiding negative impacts to profitability and competitiveness.

Juniper Networks® can help IT managers achieve “best execution” regulatory compliance with high-performance networking solutions specifically designed to improve network and application performance, maximize uptime and enhance security. Already widely adopted in financial institutions globally because of superior operational stability and advanced functionality, Juniper Networks solutions deliver the network infrastructure needed to enable the development and deployment of products and services that result in sustained competitive advantage. This document outlines how Juniper can help financial services institutions (FSIs) improve their execution and performance for compliance with MiFID and/or Reg NMS.

## The Challenge

MiFID is a regulation that applies to organizations in the European Union that engage in investment services and related activities. According to the European Union, the goal of MiFID is “to enable investors to invest and procure investment services across EU borders more easily, to remove obstacles to the use of the EU passport by investment firms, to foster competition and a level playing field between Europe’s trading venues, and to ensure appropriate levels of protection for investors and consumers of investment services across Europe.”

MiFID is a multifaceted regulation that requires changes and enhancements to the applications and networks of subject organizations. In particular, MiFID requires organizations to take all reasonable steps to ensure that clients receive the best possible result in the execution of an order. This result includes execution price, cost, turnaround time, likelihood of execution and likelihood of settlement.

Regulation NMS applies to trading and investment services organizations in the United States. Though it doesn't address the challenges of cross-border markets, it does contain policies and procedures designed to prevent "trade throughs" where orders are executed at prices inferior to those displayed in other national markets. Like MiFID, Reg NMS demands best execution for transactions and transparency of order execution. Subsequently, for European and American securities firms as well as those offering trading services in the European Union and United States, the requirement to provide best execution impacts network capacity and network performance planning and execution.

In addition to complying with MiFID, Reg NMS or both, securities and investment firms must comply with a myriad of other regulations. These regulations include Sarbanes-Oxley, BASEL II, the Gramm-Leach-Bliley Act (GLBA), the USA Patriot Act and many more. To ensure compliance with a growing number of regulations that may or may not overlap in requirements and expectations, global financial services firms typically adopt overarching standards of practices like International Standards Organization (ISO) 17799, Information Technology Infrastructure Library (ITIL) or the Control Objectives for Information and related Technology (COBIT). These standards include frameworks describing internal operational controls for mitigating and monitoring security, privacy, capacity and performance risks. Likewise, Juniper Networks products and solutions already play a significant role in the operations, security and compliance efforts of many FSIs.

## The Juniper Networks Solution for MiFID and Reg NMS Compliance

Central to deploying networked applications is ensuring the availability and optimization of capacity adequate for meeting required performance needs. In the case of networking, this not only means provisioning adequate bandwidth but also requires ensuring that bandwidth usage is optimized and that other factors impacting traffic, like latency, are minimized or completely overcome. Furthermore, it requires the deployment of network systems with adequate capacity and intelligence to handle fluctuating bandwidth requirements while ensuring the performance levels of traffic according to application requirements. Juniper Networks high-performance infrastructure provides the foundation for creating a responsive and trusted networking environment that meets the financial institution's most demanding compliance requirements.

## Features and Benefits

Juniper Networks solutions are characterized by high performance, operational stability, capacity and security:

- Routing platforms provide layers of availability through redundant components, sub-second failover, and they support BGP multi-homing to overcome Internet service provider (ISP) failure. They are also available in a wide range of configurations and capacities. Whatever capacity

specifications are required by the organization, Juniper Networks routers are the highest performing in their class. Routers are also available with comprehensive quality of service (QoS) features to manage and ensure performance levels for critical applications.

- Firewalls integrate purpose-built hardware and software to enhance operational stability while providing high performance. Juniper Networks firewalls, which are well-known in financial institutions for their enhanced operational stability, provide sub-second failover. Performance-intensive applications like voice and multimedia are accommodated for all sizes of organizations. Financial services organizations globally rely on Juniper Networks firewalls to support multicasting requirements to ensure the timely delivery and security of market data feeds. Ensuring the accuracy and timeliness of market data feeds is integral to ensuring compliance with both MiFID and Reg NMS.
- Juniper Networks IDP Series Intrusion Detection and Prevention Appliances and Deep Inspection capabilities found in routers and firewalls eliminate threats that can hamper performance and availability, such as worms and Denial of Service (DoS) attacks.
- Juniper Networks WXC Series Application Acceleration Platforms optimize WAN traffic for applications sensitive to latency and contention. By intelligently optimizing bandwidth, financial organizations can deliver timely and accurate information to remote and branch offices. The WXC Series also provides visibility into WAN utilization by applications, enabling management and reporting for MiFID and Reg NMS compliance.

The importance of availability and contingency planning, in particular for financial institutions, is well known to Juniper Networks. In addition to ensuring the availability and performance of systems as described above, organizations must plan for network downtime and degraded service on both small and large scales. For this reason, the stability, resiliency and HA capabilities required by enterprise networking solutions are central to all Juniper Networks products, not only to those designed to provide high availability (HA).

WXC Series Application Acceleration Platforms are specifically designed to facilitate disaster recovery and business continuity. For example, the WXC Series speeds up replication across the WAN, ensuring successful backup and restore to offsite locations while controlling costs. Manual backup is typically subject to high rates of failure and incompleteness, which is problematic for organizations with many remote and branch offices. Maintaining accurate records of transactions and operations is required to ensure compliance with both MiFID and Reg NMS. Since application acceleration solutions enable real-time data replication, organizations can operate backup sites in an active/active mode. This helps ensure IT continuity by establishing backup sites that are up-to-date and properly functioning at all times.

## Summary—High-Performance FSIs Rely on Juniper’s High-Performance Networking Solutions

Juniper Networks is an established and innovative networking company with a proven record of success in the global banking and financial services market. Our technology vision is backed by a portfolio of market-leading products. Our financial services customers rely on Juniper in developing and marketing their own competitive products and services. Juniper platforms deliver high-performance networks that provide the operational stability, security and performance that FSIs need to increase customer acquisition and retention, consolidate business units and networks, control costs and increase return on assets.

## Next Steps

For additional details about the many ways Juniper’s routing, security and application platforms help financial institutions address business and networking issues, please visit [www.juniper.net/financial-services](http://www.juniper.net/financial-services).

## About Juniper Networks

Juniper Networks, Inc. is the leader in high-performance networking. Juniper offers a high-performance network infrastructure that creates a responsive and trusted environment for accelerating the deployment of services and applications over a single network. This fuels high-performance businesses. Additional information can be found at [www.juniper.net](http://www.juniper.net).

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