



# Mellanox and Rafael Provide Advanced Machine Learning Platform

## MACHINE LEARNING – THE HEART OF TODAY'S TECHNOLOGY

Data analytics has become an essential function within many high performance clusters, enterprise data centers, clouds and Hyperscale platforms. However, traditional analytics tools are not well suited to capturing the full value of big data because the volume of data is much too large for comprehensive analysis between disparate data sources. Machine learning is ideal for exploiting the opportunities hidden in big data by discovering and displaying the patterns and commonalities buried in the data.

Machine learning is a pillar of today's technological world, offering solutions that enable us to make better and more accurate decisions based on the great amounts of data we collect. Machine learning encompasses a wide range of applications, ranging from image and voice recognition to security and financial fraud protection to self-driving cars and smart cities. Machine learning applications and platforms are critical toward enabling the next generation of products that will improve our safety and our way of life.

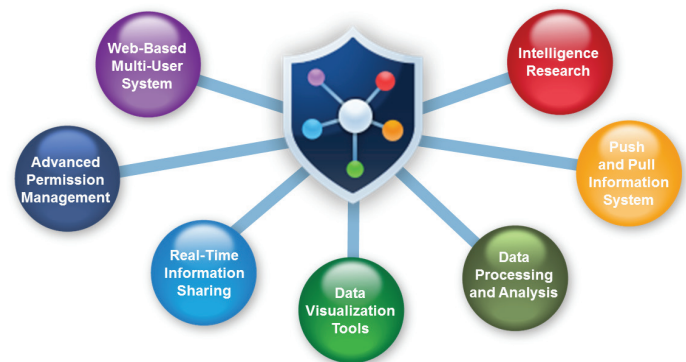
Machine learning platforms rely on the ability to analyze growing amounts of data in real time, which requires an exceptionally fast, efficient, smart, and reliable network. As such, Rafael has partnered with Mellanox to offer a world-leading machine learning platform, leveraging Mellanox CloudX™ architecture with smart high-speed interconnect solutions for both Ethernet and InfiniBand with Rafael's Wisdom Stone™ Machine Learning software. This new turnkey solution will allow companies to build the most efficient high-performance and scalable machine learning appliances.

## RAFAEL WISDOM STONE™

Wisdom Stone is an advanced data integration and analysis software package that enables customers to reveal hidden patterns, connections and activities, facilitating real-time analysis, data mining, and information visualization capabilities.

Wisdom Stone provides an extendable, adaptable and scalable solution that enables real-time advanced analysis procedures. It rapidly transforms data into knowledge and into actionable intelligence while bringing efficient insights from stored data.

### Wisdom Stone Software

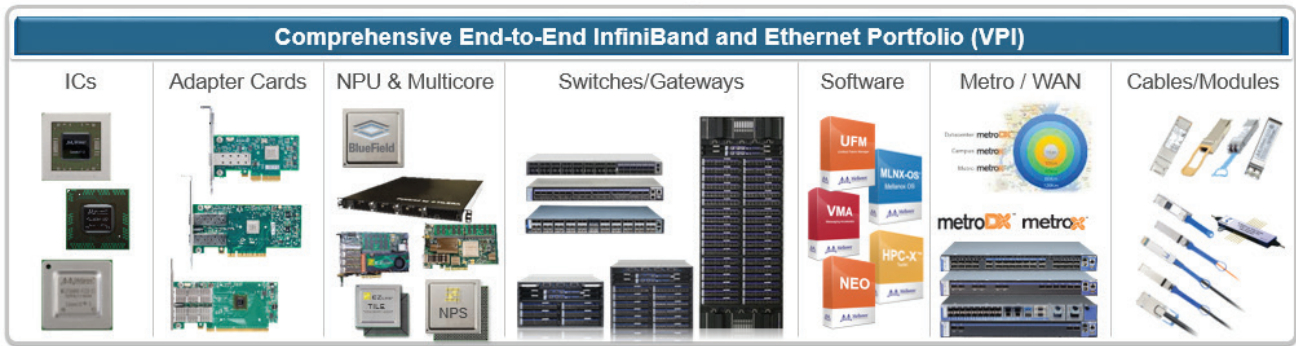


Wisdom Stone can access data records, population registries, social networks, border access controls, and various file databases to collect, filter, process, and analyze data. It offers voice and face recognition algorithms, creating multiple layers of detection and prevention for security organizations and highly accurate predictions for various enterprise applications.

## MELLANOX HIGH PERFORMANCE SOLUTION

Machine learning techniques rely heavily on high throughput and low-latency interconnect fabrics to train deep neural networks and to improve recognition and classification accuracy. Mellanox CloudX and High-Performance Computing architectures and world-class end-to-end high performance network solutions, with up to 100Gb/s throughput and extremely low latency, provide machine learning applications with the levels of performance and scalability that they require.

Moreover, Mellanox enables data to be analyzed wherever it is located, increasing the efficiency of the neural network and driving machine learning applications to greater levels of performance and scalability than ever before.



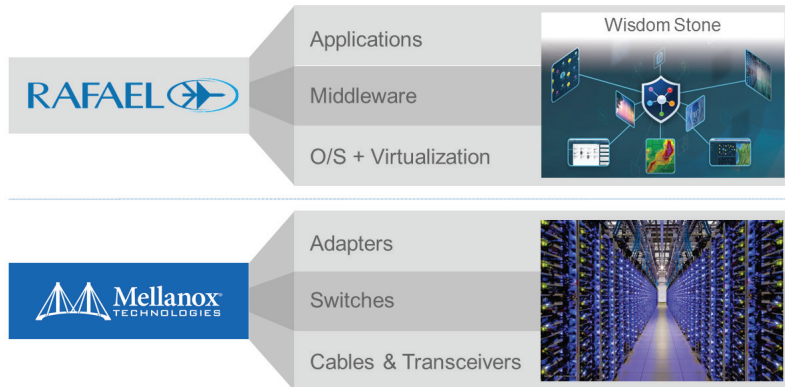
## MACHINE LEARNING PLATFORM

The combination of Mellanox interconnect solutions and architectures and the Rafael software suite delivers the most advanced machine learning platform to help enterprises, cloud providers and security agencies to maximize the usage of data. Together, the two companies have built an efficient, adaptable, scalable, robust platform that collects, merges, and analyzes huge amounts of distributed data from multiple sources in real time and transforms that data into executable intelligence.

The result is an ideal solution for the most demanding organizations with the most challenging security and intelligence requirements.

For additional information on this advanced machine learning platform, or for other integration options, please [email us](mailto:info@rafael.co.il).

### Converged Platform



#### About Mellanox

Mellanox Technologies is a leading supplier of end-to-end InfiniBand and Ethernet interconnect solutions and services for High-Performance Computing clusters, enterprise data centers, data analytics and Machine Learning applications, and Web 2.0, cloud, storage and financial services. More information is available at [www.mellanox.com](http://www.mellanox.com).

#### About Rafael

Rafael Advanced Defense Systems Ltd. designs, develops, manufactures and supplies a wide range of high-tech defense systems for air, land, sea and space applications for the defense establishments around the world. The company offers its customers a diversified array of innovative solutions at the leading edge of global technology, from underwater systems through naval, ground, and air superiority systems to space systems. For more information, see [www.rafael.co.il](http://www.rafael.co.il).



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