



# Bilyoner's Hyper-converged Online Gaming Platform with Mellanox Ethernet Switches

## BACKGROUND

Bilyoner, the first electronic gaming platform in Turkey, provides games of chance and sports betting games through many available web devices to over 2.5 million members. Through its platform, members access gaming services and make swift online transactions. As online gaming evolves, Bilyoner aims to offer its services as entertaining, innovative and reliable as possible to members at all times and at any place through all possible channels.

Bilyoner's previous data center could not cope with its growing customer base and services: frequent performance problems and component replacements caused service interruptions. In addition, servers and network equipment were out of warranty and expensive service agreements to be renewed.

To address these issues and improve data center efficiency, Bilyoner re-architected its data center with a hyper-converged solution integrated with Mellanox 10/40G Ethernet switches.

## SOLUTION OVERVIEW

The hyper-converged architecture allows compute, storage and virtualization on the same platform, thus completely removing the weakness of traditional SAN and greatly improving the data center efficiency. At Bilyoner, with the hyper-converged infrastructure, its application servers, configuration management servers, and the OpenShift-based Docker environment are all hosted in a 3-node, 2U appliance.

High-performance networking is required for data movement between the hyper-converged nodes. In particular, higher network speed and reliable network connectivity are essential for virtual machines and containers to migrate among nodes for business continuity. The Mellanox 10/40G SX1024 switches fit perfectly for these requirements:

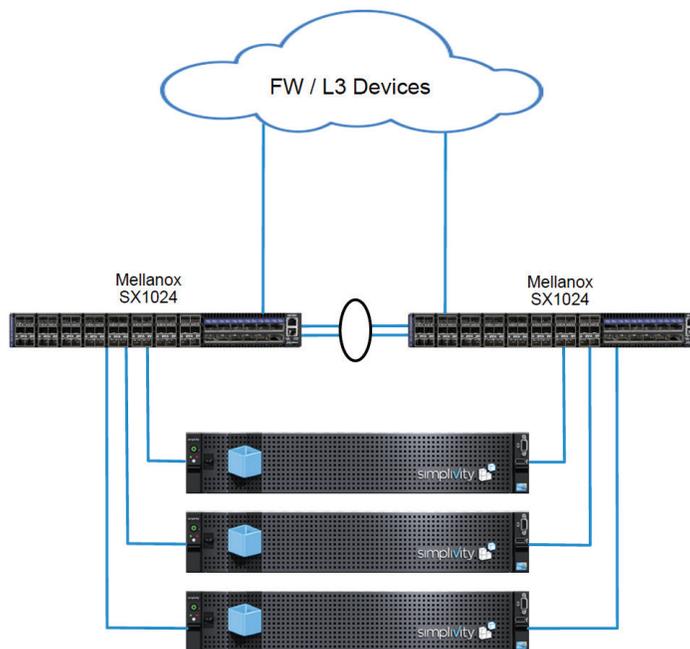
- 48-port 10G ports not only provide needed 10G links to the nodes, but also serve the connections to Bilyoner's existing 1G network by using 1000Base-T SFP transceiver modules.
- 40G ports facilitate faster data transfer between the nodes. In case of hardware failure, affected workloads can be migrated to healthy nodes in a short time without business disruption.
- Flexible 10/40G port configuration makes SX1024 future proof for system upgrade.
- Best \$/performance, low power consumption and ease of use separate Mellanox switches from their peers, and result in great CAPEX-OPEX savings to Bilyoner.

## KEY BENEFITS

- Integrated hyper-converged solution provides compute, storage, networking and virtualization in a single infrastructure
- Perfect TOR switches support 10G connections between hyper-converged nodes, as well as 1G links to existing network
- 40G high-performance links guarantee fast workload migration and business continuity
- Best \$/performance ensures maximum data center efficiency

*"Our customers are playing online sports betting and national lottery, so our services have to be fast, always up and running. Mellanox delivers faster and most reliable networking to help us achieve our goals."*

Aziz Sasmaz  
Manager, Systems & Network  
Administration, Bilyoner



## Technical Resources

For additional product information and use cases on Mellanox Ethernet switches, visit <http://www.mellanox.com/ethernet/switches.php>

## About Mellanox

Mellanox Technologies is a leading supplier of end-to-end InfiniBand and Ethernet interconnect solutions and services for servers and storage. Mellanox interconnect solutions increase data center efficiency by providing the highest throughput and lowest latency, delivering data faster to applications and unlocking system performance capability. Mellanox offers a choice of fast interconnect products: adapters, switches, software, cables and silicon that accelerate application runtime and maximize business results for a wide range of markets including high-performance computing, enterprise data centers, Web 2.0, cloud, storage and financial services. Learn more about Mellanox products and solutions at [www.mellanox.com](http://www.mellanox.com).



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