Bezeq International manages cloud platform for 4,000 Israeli schools

Thousands of children rely on learning delivered by HPE Synergy

Challenge

Platform for major national project

In 2010, the Israeli Ministry of Education decided to move all the country’s 4,000 schools onto a new private cloud. It issued its largest ever request for proposal (RFP) for the management of this platform and awarded the contract to Bezeq International (BI), making it one of the country’s biggest players in the cloud-centric IT market.

Founded in 1996, BI entered the internet market in 1999 and is now considered to be Israel’s leading internet service provider with the market’s highest growth rate. It is based in Petah Tikva and a number of international locations and is a wholly owned subsidiary of Israel’s largest telecom group, Bezeq.
“I need to be ready with a solution that I can use to execute any project very quickly. I provide services to many customers and I do not know what their future plans are. If they want me to do something, I must do it fast and the agility and power of its composable infrastructure makes HPE Synergy the ideal platform.”

– Gavriel Magilner, private cloud manager, Bezeq International

BI is Israel’s leader in all its main areas of activity, which include telephony, IT and cloud computing services, outsourcing, website and server hosting, colocation, disaster recovery solutions, data communications, and cybersecurity. As an Independent Software Vendor, BI also partners with many major vendors.

Winning the Ministry of Education contract was an important milestone in the company’s growth. As well as being connected to all the country’s 4,000 schools, the private cloud is used by many third-party vendors, which provide online learning for thousands of children so the platform had to be powerful and fail-safe. BI decided that its legacy unified computing environment fell short of the requirements.

“We decided to change because there were some limitations in the former infrastructure. It did not meet our requirements and did not have very good support. I wanted to be ready with a platform that I could use to execute any project very quickly,” says BI’s private cloud manager, Gavriel Magilner. “I do not know what our customers’ future plans may be but whatever they are, I need an infrastructure that will enable me to do it fast. I needed a platform that I could use for everything so I would be ready for any project that my customers would request.”

Solution

Composable computing infrastructure
To keep pace with growing customer demands, BI needed a system that would deliver enhanced performance that was secure, easy to manage, and adaptable. Most importantly, the new solution had to be backed by efficient support. Having researched the market, it took a closer look at two possibilities. HPE presented its composable infrastructure solution, HPE Synergy, and BI liked what it saw. It became the first customer in Israel to buy the solution.

HPE Synergy brings compute, network, and storage infrastructures together as a single platform with integrated management. It features three main attributes—fluid pools of resource, software-defined intelligence, and a unified Application Programming Interface (API). Fluid pools of resource give instant accessibility to all the resources required to run applications including compute, memory, storage, and fabric. Software-defined intelligence takes the pools and uses them to give an application the exact footprint it needs, making it easier for applications to be deployed, and having a single API across compute, network, and storage enables the whole infrastructure to be programmed in an automated manner.

The composable infrastructure is delivered by the HPE Synergy Composer, which is powered by the converged infrastructure management platform, HPE OneView.

BI has implemented two HPE Synergy 12000 Frames in one of its two data centers and they are populated with 18 HPE Synergy 480 Gen10 Compute Modules. Powered by the Intel® Xeon® scalable family of processors, the compute modules are efficient and flexible 2-socket workhorses that are engineered to support the most demanding workloads. BI’s HPE Synergy platforms also feature the integrated and automated provisioning appliance, HPE Image Streamer, which is a repository for images that can be instantly cloned and personalized for stateless infrastructure and streamed onto compute nodes at speeds faster than the most popular hypervisor.
Although HPE Synergy has its own integrated storage bays, BI has opted to attach it to external SAN storage with HPE 3PAR and HPE Nimble Storage, which deliver some 400 TB of storage capacity.

The platforms are covered by a 3-year HPE Proactive Care contract, which includes 24x7 coverage and next business day service.

“HPE Pointnext carried out the implementation, which went smoothly. They did a good job,” says Magilner.

Benefit

Meeting both current and future demands

HPE Synergy is currently located in one of BI’s data centers and the company’s legacy system is still used at the second location. HPE Synergy is employed solely on the education cloud and splits the work with the other system, but BI plans to go 100% over to HPE Synergy in the near future. HPE Synergy will then become the sole platform for the whole of Israel’s ambitious education cloud. It will support some 2,000 virtual machines and the work of all 4,000 schools, delivering e-learning to thousands of pupils and running the learning software of many third-party customers in the education world.

Being the sole platform provider for such a huge, national project, BI has to be prepared for all eventualities. Magilner does not know what challenges and customer demands the future holds but sees the power and composable computing flexibility of HPE Synergy as the ideal solution for covering all eventualities and demands. This is largely due to the fact that its compute modules deliver wide choices with the performance, capacity, and efficiency to power most workloads.

The agility of HPE Synergy has been underlined by stringent testing conducted by Principled Technologies of North Carolina and endorsed by HPE. It has revealed that deploying and managing servers is more efficient with HPE Synergy. It tested four typical data center deployment and management tasks and found that they took 63% less time with HPE Synergy, when compared to another leading unified computing system.¹

Indicating how HPE Synergy enables him to be prepared for the future, Magilner says: “First of all we know that HPE is able to provide good support and that is most important. Secondly, we know that we can do a lot of things with the product. At the present time, we are not using all of the HPE Synergy functionality. For example, the HPE Image Streamer is something that I knew I would not use, but the option to have it and the graphics processing unit is good because they may be something that we will use in the future.

“The main benefits for today are that we find HPE Synergy very easy to use and that HPE OneView is a good and easy management tool. It works well with VMware® and is a good and easy product that does the job and comes with great support. From the start, HPE has been a good candidate for this project and since we partnered with them our relationship has become even stronger.”

Learn more at hpe.com/synergy

¹ Deploy and manage servers more efficiently with HPE Synergy, Principled Technologies, August 2017

Case study
Bezeq International
Industry
Communications provider

“HPE Synergy is a good and easy product that does the job and comes with great support.”
– Gavriel Magilner, private cloud manager, Bezeq International

Customer at a glance

Hardware
• HPE Synergy 12000 Frames
• HPE Synergy 480 Compute Modules
• HPE 3PAR StoreServ Storage
• HPE Nimble Storage

Software
• HPE Synergy Composer
  (HPE OneView)

HPE Pointnext Services
• Implementation services
• HPE Proactive Care