

CUSTOMER PROFILE

Hellas Online



EMC Ionix helps safeguard service availability for voice and Internet customers

Hellas Online (HOL) is one of the leading providers of fixed-line telephony services in Greece. Founded as an Internet service provider (ISP) in 1993, HOL today provides a full range of voice and Internet access services, including broadband Internet, leased-line, metro Ethernet, virtual private network (VPN), and web hosting.

The company operates the second largest network in Greece. Through its points of presence (PoPs), comprising physical co-location in unbundled local loops (LLUs), HOL delivers services to 70 to 80 percent of residents of metropolitan Athens and Thessaloniki—Greece's two largest cities. HOL also has a significant presence in smaller cities and towns throughout Greece.

HOL's prior network management environment had been developed in-house and was based on Big Brother for network monitoring and Multi-Router Traffic Grapher (MRTG), a basic tool for SNMP monitoring. When Athens-based HOL introduced VPN and other services via a new MPLS (multiprotocol label switching) network, its network management solutions were not able to provide centralized management and high service availability across multiple IP-based networks.

In addition, with HOL's limited in-house development resources, combined with Big Brother and MRTG lacking vendor support, it meant that the telecommunication provider was not able to use the latest standards in network technologies. It was difficult to provide network management training to new engineers because there was no system documentation. HOL's network management infrastructure also was becoming increasingly expensive to maintain and support as several short-term software fixes had been implemented.

EMC Ionix solution

HOL's network operations staff determined migrating to a best-in-class, vendor-supported solution would address its growing network management issues. After evaluating all of the major network management solutions, HOL first eliminated IBM Tivoli Netcool and HP Network Node Manager. They did not deliver true automated root-cause analysis (RCA) and impact analysis, and required the time-intensive task of writing new rules to support frequent network changes.

Next, HOL conducted a two-month field evaluation of EMC® Ionix™ for Operations Intelligence powered by patented EMC Smarts™ Codebook Technology and CA Spectrum Infrastructure. EMC Ionix for Operations Intelligence was chosen by HOL for its ability to automate RCA and impact analysis at the network service layer.

HOL uses Ionix to centrally manage and automatically discover logical and physical devices across its MPLS network, supporting multicast and other VPN services as well as its access network handling voice, broadband, and ADSL offerings. Both networks are supported by HOL's IP backbone infrastructure.

Today, nearly all of HOL's over 300,000 customers access network services overseen by EMC Ionix. HOL also counts on Ionix to manage its internal operations such as billing, customer relationship management, and other enterprise applications, which run in a VMware® virtualized server environment.

Challenge

- Introduction of new networks and service offerings increased business requirements for centralized network management and improved service reliability
- Increasing costs related to network management support and maintenance
- Lack of root-cause analysis

Solution

- EMC Ionix for Operations Intelligence (powered by EMC Smarts):
 - EMC Ionix MPLS Manager
 - EMC Ionix Multicast Manager
 - EMC Ionix Network Protocol Manager
 - EMC Ionix IP Availability Manager

Key benefits

- Realtime monitoring of IP MPLS network
- Root causes of many network problems identified within 10 minutes compared to at least two hours previously
- Significant reduction in the number of trouble tickets
- Improved network service reliability
- Maintained size of network administration staff even as networks and service offerings increased

Results

With EMC Ionix, HOL is able to automatically monitor about 3,500 network devices across multiple IP-based networks. Since migrating to Ionix, HOL's network administration staff has gained significantly more control and responsiveness when network issues develop.

"Because EMC Ionix gives us realtime automated surveillance, we have much faster reaction times to any network issues that develop," says George Anastopoulos, senior manager, Network Operations. "We can identify many causes to problems within 10 minutes—roughly one-tenth the time it used to take when we had to do everything manually."

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For example, HOL uses EMC Ionix Multicast Manager to provide critical intelligence on how to view membership of multicast groups; layout multicast trees, active sessions, and protocol entities; and understand how these relate to the underlying IP network.

"EMC Ionix lets us go more deeply into the network and find the device or protocol that may be causing the issue," says Anastopoulos. "We can react immediately before multiple customers start reporting slow performance."

Because HOL can identify issues before customers are affected, the number of trouble tickets has been reduced significantly. Ultimately, HOL has achieved better service reliability and higher customer satisfaction.

HOL also has been pleased with the time savings for staff using EMC Ionix automated network management capabilities.

"Even though we've added new networks and services, we've been able to maintain our staff of three per shift network administrators and avoid hiring new staff," says Anastopoulos.

EMC Ionix is integrated with HOL's CA eHealth Performance Manager solution which generates statistics on network traffic performance. If network traffic drops unexpectedly, the information is sent to Ionix which correlates the data with root-cause data and generates a comprehensive alarm to alert network operators.

"Because Ionix has a flexible, open design, it was very easy to integrate with another vendor's network performance solution that we use; so we have a centralized source for alarms based on hardware issues, as well as performance problems," says Anastopoulos.

Because of this project's success, HOL is expanding its use of Ionix to provide a consolidated, realtime view of all of its networks. Once fully implemented, Ionix is expected to provide HOL with even more significant improvements in service availability and cost efficiency.

"When all our networks are under the Ionix umbrella, our network operators will be able to view and monitor them from a single screen," says Anastopoulos. "Today, our network operators often each have four to five PCs and monitors. It will be easier for them to look at a single console and see what's happening across the different networks. We'll also reduce costs because our staff will be more productive, and we'll need fewer monitoring consoles and screens."

HOL also is implementing EMC Ionix Business Impact Manager (BIM) to provide additional intelligence on network issues and correlation on how the issues of one business process affect a related process.

“The EMC Ionix BIM solution will help us look more deeply at individual customers,” says Anastopoulos. “So when we have a problem, we’ll see exactly which customers are affected and whether the issue originated with their own equipment or in our core network infrastructure. Because we’ll have clearer visibility into the environment, we’ll be able to respond to issues even faster.”



EMC Corporation
Hopkinton
Massachusetts
01748-9103
1-508-435-1000
In North America 1-866-464-7381
www.EMC.com

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