

Largest Baltic Telco Improves Tracking of Mobile Services

Omnitel Lithuania deploys Cisco Content Services Gateways for performance, capacity, and accurate usage tracking of services.

EXECUTIVE SUMMARY
<p>OMNITEL LITHUANIA</p> <ul style="list-style-type: none"> • Telecommunications • Lithuania • 800 Employees
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Accurately track usage of mobile services (voice, Internet access, mobile TV) by two million subscribers • Manage tremendous growth in traffic stemming from high-speed mobile broadband data services • Integrate tracking and billing platforms for a reliable enterprise-class business solution
<p>NETWORK SOLUTION</p> <ul style="list-style-type: none"> • Upgrade existing Cisco Content Services Gateway (CSG) to second-generation platform (CSG2) • Partner with Openet to deliver a complete usage tracking and billing solution • Cisco Technology Migration Program for technical assistance and financial incentives during testing and upgrade processes
<p>BUSINESS RESULTS</p> <ul style="list-style-type: none"> • Increased capacity and performance for content-aware billing • Fine-grained monitoring translates to service pricing flexibility • No disruptions to user base or billing services (in-service upgrade)

Business Challenge

Omnitel Lithuania is the largest telecommunications provider in the Baltic States, and its two million customers make up half of the entire mobile services market in Lithuania. The country's population represents one of the world's most sophisticated mobile markets, and mobile minutes exceed fixed call times. To capture its market lead, Omnitel consistently introduced network advances to enable superior service offerings and flexible rate structures including pre-pay and wireless services.

Most Lithuanian mobile subscribers (76 percent) take advantage of mobile devices for Internet access. Omnitel anticipated this trend and its usage tracking and billing system was designed to monitor voice, data, and video services in real time. Because the majority of Lithuania's mobile customers are on pre-pay contracts, Omnitel's revenues depend on timely monitoring of usage and correlation with credit data.

Recent challenges stem from the tremendous growth in traffic and uptake rates associated with high-speed mobile broadband data services. This rapid increase in mobile broadband traffic is expected to continue due to several factors:

- 3G and 4G technologies promise to introduce new capacity into mobile radio access networks (RANs).

- Omnitel now offers the Apple iPhone to its subscriber base, which will further fuel the surge in data service usage.
- Internet applications such as email, instant messaging, web surfing, and social networking are commonplace in Lithuania.
- New services such as mobile TV are bandwidth heavy.

With the existing content-aware billing platform reaching its limits, Omnitel needed a solution with more capacity and performance. As with its original solution, reliability was a major requirement because missed packets quickly add up to lost revenue.

Network Solution

The existing Cisco® Content Services Gateway (CSG) and content-based billing solution had performed reliably for years. Omnitel was confident that Cisco could help them stay ahead of mobile data traffic growth and upgrade to an even higher-capacity, higher-performance solution. In fact, the second-generation Cisco Content Services Gateway (CSG2) was designed specifically for operators like Omnitel. With the ease of upgrade from a Cisco CSG to a Cisco

CSG2, Omnitel was able to benefit from a simple migration path without disruption of usage tracking capabilities or services delivery.

Deployed at the edge of the mobile data network, the Cisco CSG2 delivers increased capacity with up to 1.2M connected subscribers and up to 1.8M concurrent sessions, broadband performance with up to 8 Gbps throughput for large packets, and the Layer 7 service awareness and bandwidth control requisite for Mobile Internet. The Cisco CSG2 allows Omnitel to continue to bill based on the actual content being provided. Like the previous solution, it monitors and meters data traffic at Layer 4 through Layer 7 and passes usage information to a billing mediation agent. The packet inspection techniques allow the operator a broad range of service pricing models, which translates into flexibility in the market.

To give Omnitel a complete solution tailored to its business needs, Cisco collaborated with its partner Openet. The final upgrade proposal combined the Cisco CSG2 with Openet FusionWorks Convergent Charging and FusionWorks Network Edge Rating. Cisco and Openet offered Omnitel flexible billing control, reliability, and the ability to scale as the operator gains data services subscribers and expands its services portfolio.

The collaboration between Cisco and Openet gave Omnitel an affordable, complete solution and an integration plan that was fast and non-disruptive to its business. The company expects carrier-grade products and solution designs from Cisco, and once again Cisco came through.

The proposed solution was fully tested at Omnitel. The ability to upgrade in-service CSGs allowed the operator to gradually deploy the new Cisco CSG2 while bringing the new billing system online. The Cisco Technology Migration Program provided additional incentives for the upgrade path, with Omnitel receiving equipment for testing, technical assistance, and trade-in discounts based on their existing Cisco CSG platforms.

Business Results

Omnitel has now upgraded all of the original Cisco CSG devices to the Cisco CSG2 without service interruption. With increased capacity and performance, the cost-effective Cisco upgrade gives them a long-term foundation for real-time content-based billing. The comprehensive, fine-grained monitoring suits new and emerging services, and the integration with Openet positions Omnitel to rapidly deploy new data services in response to market opportunities.

This business agility is integral to Omnitel's deployment of content-based value-added services. Because differentiation in the market today often comes down to content, the content-aware billing solution can help Omnitel strengthen its brand and build a loyal customer base. Price can attract and retain subscribers, but innovative services and the ability to accurately bill for them will also enable Omnitel to drive increases in average revenue per user (ARPU).

Content-aware billing will also directly improve the subscriber experience on the Omnitel network:

- More and better content can be provided because the operator can track and bill for it.
- Real-time content tracking allows the operator to avoid billing surprises by asking customers to accept an Advice of Charge (AoC) prior to delivering the content.
- The packet-based inspection techniques built into the Cisco CSG2 avoid double charges in the event that a subscriber requests a service a second time after an unsatisfactory delivery.
- Objectionable content can be detected and filtered out.

The relationship with Cisco led to a simple solution to its capacity and performance challenges. Cisco anticipated the needs of mobile network operators like Omnitel Lithuania, and introduced its second-generation Content Services Gateway at just the right time. The provider can now maintain its competitive strength and grow the business with

more versatile back-end systems. Experience has shown Omnitel that the Cisco platforms are truly carrier class: stable, highly available, and designed for high-throughput environments.

For More Information

To find out more about the Cisco Content Services Gateway, go to:

http://www.cisco.com/en/US/prod/collateral/wireless/wirelssw/ps779/data_sheet_c78-512166.html.

To find out more about Service Provider Mobility solutions from Cisco, go to: <http://www.cisco.com/go/mobile>.

PRODUCT LIST
Content Services Gateway



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