



“The NetNumber TITAN platform enables us to easily transition from our current 3G network to LTE Advanced, and support customized mobile phone and data networks for our customers with unique requirements.”

—Samer Bishay, President/CEO, Iristel and ICE Wireless

The Customer’s Story

Iristel is Canada’s largest and fastest growing carrier providing innovative communication services that are changing how consumers and businesses communicate. Founded in 1999, Iristel operates Canada’s largest facilities-based local voice network extending from the Atlantic, Pacific and Arctic Oceans as well as Ice Wireless, a GSM carrier with operations in Canada’s Far North.

Iristel has evolved from a small start-up to an international telecommunications service provider. Iristel customers include residential and commercial customers and Incumbent Local Exchange Carriers (ILECs) and Competitive Exchange Carriers (CLECs) with Canadian local access requirements.

Iristel is committed to using the most advanced Internet-based technologies to provide Canadians with reliable and cost-effective voice and data services. By building expertise in wireless IP, Iristel is uniquely positioned to deliver exciting capabilities offered by no other VoIP operator in Canada.

In many parts of the remote and rural areas of Northern Canada, high-definition voice and video remain spotty, at best, or unavailable. The carrier’s goal is to work towards eliminating the Digital Divide and promote economic opportunities for the indigenous peoples and others who choose to live in the remote and beautiful, but harsh, areas of Canada.

At a Glance

- Iristel, Inc. is Canada’s largest and fastest growing carrier, providing communication services to 10 provinces and three territories throughout the region.
- Location: Canada
- Challenges
 - Remote and harsh environment
 - Geographically diverse subscribers
 - Millions of sensors monitoring weather, natural resources, etc.
- TITAN Services
 - HSS and HLR
 - DSC
 - EIR
 - PCRF
- Results with TITAN
 - Easy transition from 3G to LTE Advanced
 - Ability to provide services in rural areas that meet Connecting Canadians federal Initiative
 - Future-proof support for IoT



The Solution

NetNumber TITAN is the industry's most robust centralized signaling and routing control (CSRC) platform. It provides a common, virtualized infrastructure for all signaling control, routing policy enforcement and subscriber database services in the network. TITAN uniquely delivers centralized provisioning and management combined with a powerful distributed, in-memory database replication method that enables all signal processing to happen at the optimal location in an operator's network.

Iristel selected the NetNumber TITAN platform with multiple applications, including the Home Subscriber Server (HSS) and Home Location Register (HLR) to enhance services for ICE Wireless customers. Other applications soon to follow include: Diameter Signaling Controller (DSC), Equipment Identity Register (EIR) and Policy and Charging Rules Function (PCRF), to transition from 3G to LTE Advanced services such as high-definition video.

The TITAN platform will improve signaling and routing of calls and data across the Iristel and ICE networks, and enables Iristel to easily transition from its current 3G network to LTE Advanced, and support customized mobile phone and data networks for customers with unique requirements.

Iristel's primary concern was the need for high availability given the expansive and rural area of coverage requires network equipment to be largely unattended. With limited power available, any network equipment must be in a compact form factor that won't use a lot of power. According to Iristel CEO, the NetNumber TITAN product fill all the company's requirements because it is software-upgradeable and modular. Iristel can select and "spin up" TITAN applications in a virtualized environment to future-proof their network.

The Results

Working with NetNumber, Iristel can deliver exciting new services to its customers while focusing on cost reductions and service agility. For example, rural Canada is now able to get LTE Advanced, which not even carriers in the Canadian South can offer subscribers.

Iristel expects NetNumber's TITAN platform will help it meet the requirements of the Connecting Canadians initiative. This is a federal program that splits the cost of building broadband infrastructure to speeds of at least 5 Mbit/s in areas of slow or no service, such as the regions in rural Canada that Iristel supports.

Iristel also tapped NetNumber to give the service provider the flexibility to scale for IoT applications. A hardware-based solution would be unable to provide the same kind of flexibility, requiring prior forecasting to prevent the equipment from becoming obsolete quickly. That's a particular concern with IoT and on-demand applications, especially in rural Canada, with a large volume of sensors deployed. There are a lot of sensors being deployed to monitor weather, seismic activity, natural resources, and applications such as mining. While the population of Northern Canada is only about 100,000, there are going to be millions of devices connecting the carrier's network given the various types of sensor data. Being able to predict today the network requirements of even a few years out is difficult, and would likely be inaccurate. The flexibility inherent in the NetNumber TITAN platform is key.

For More Information

For more information about NetNumber TITAN, visit www.netnumber.com or contact your local account representative via sales@netnumber.com. Connect with NetNumber on Facebook, Twitter and LinkedIn.