

## Gaharu Telecom Indonesia Leads in Its Market with Outstanding VoIP Service

Adding Dialogic® IMG 1010 Integrated Media Gateway Further Strengthens Voice Quality and Improves Service

### CASE SUMMARY

#### Challenge

To keep its leadership position in the retail and wholesale VoIP service provider market in Indonesia and to continue to bolster the already excellent reputation of its Hallophone brand, Gaharu Telecom Indonesia decided that it would have to upgrade its aging network. Its old system took up too much rack space for the density it delivered, and provided only a basic feature set, which was insufficient in a highly competitive market.

#### Solution

Gaharu Telecom Indonesia switched to the Dialogic® IMG 1010 Integrated Media Gateway, which provides high density and voice quality, connection to SS7, carrier-level reliability, and a rich feature set in a small footprint (1U) chassis. Gaharu Telecom Indonesia credits the IMG 1010 with helping it retain its leadership position.



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#### Challenge

As the leading Indonesian VoIP service provider, with an estimated market share of 60% in 2009, Gaharu Telecom Indonesia brings retail and wholesale VoIP to both consumers and corporate customers, and also meets the demanding standards required for international carrier connections. Its Hallophone brand is synonymous with premium voice quality and superb customer service, and in Indonesia, customers ask for a “Hallophone” when they want to purchase a prepaid VoIP calling card.

To serve its nearly 200,000 prepaid and postpaid customers and manage a VoIP network that reaches the 10 most populous cities in Indonesia, Gaharu Telecom Indonesia has had to meet the many challenges that come with explosive growth. Faced with an aging network a few years ago, the company decided to bring in new technology that would help it keep its leadership position and continue to grow its business.

Several characteristics were important. One problem with the existing system was that it took up too much expensive rack space to deliver the density that Gaharu Telecom Indonesia needed at that time — and would need in the future. Along with more capacity in a smaller footprint, the new equipment would have to handle SS7 because of Gaharu Telecom Indonesia’s termination business and single-stage International Direct Dialing (IDD), which required seamless connection to SS7-based cellular partners, such as XL and Telkomsel.

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Also on the “must-have” list was a platform that delivered a broad set of ready-to-use features, since its existing system provided only a very basic feature set. Partners were increasingly requiring very complex network designs, which could only be satisfied with equipment that provided a rich set of features in a single box. Gaharu Telecom Indonesia also had a uniform platform policy, which meant the new equipment would have to be able to handle additional Points of Presence (POPs) at a reasonable cost.

And, of course, the new equipment would have to provide field-proven, carrier-level reliability.

### Solution

After an extensive search for new equipment for its network, Gaharu Telecom Indonesia chose the Dialogic® IMG 1010 Integrated Media Gateway, a carrier-ready VoIP gateway that supports both media and signaling in a single chassis. Its robust features set allows Gaharu Telecom Indonesia to add new telephony services and partners quickly and with confidence, and supports up to 768 gateway channels or up to 1024 IP channels in a 1U chassis.

The IMG 1010 delivers any-to-any voice network connectivity and can bring SIP services into legacy PRI, CAS, and SS7 networks. In addition, it offers border element functions, such as SIP mediation and IP-to-IP transcoding for network peering applications. Its compact 1U high-density design, integrated SS7 termination across multiple gateways, GUI-based management, and software licensing for in-service capacity expansion make the IMG 1010 an excellent option for Gaharu Telecom Indonesia’s VoIP business.

The IMG 1010 also features the Dialogic® Programmable Protocol Language (PPL), which allows rapid implementation of SS7 ISUP variants and other signaling changes, a feature which is very important for service providers that are expanding. By supporting SS7 signaling, call routing, call translation, and IP transcoding in a single chassis, the IMG 1010 allows Gaharu Telecom Indonesia to reduce complexity and administrative overhead for VoIP services, and perform on-the-fly voice coder conversion.

Its NEBS-3 carrier-grade design uses independent network interfaces to separate transport, signaling, and OAM&P, allowing the IMG 1010 to provide high reliability and service availability for Gaharu Telecom Indonesia. Because it works with load balancers, the IMG 1010 can also optimize the distribution of SIP traffic to further improve scalability and fault tolerance.

### High Praise from Gaharu Telecom Indonesia

Although many factors have led to Gaharu Telecom Indonesia’s success, including an excellent, visionary executive team, Sonny Hamdani, Chief Executive Officer at Gaharu Telecom Indonesia, has high praise for the IMG 1010. “The IMG 1010 gives us exactly what we need to be competitive,” comments Hamdani. “Its compact size has reduced our rack space rent considerably, and our routine equipment replacement costs are lower because our old system equipment was very expensive and hard to get. We are also very relieved that we no longer have to worry when accepting more Tier 1 traffic to Indonesia because of the excellent reliability we have experienced with the IMG 1010. And because of its flexible media processing and the wide variety of coders and packet sizes it supports, we can cater to many Tier 1 standards. We do not have to reject any business because we are able to meet different carrier requirements easily now.”

The IMG 1010’s ease of use is also important to Gaharu Telcom Indonesia. “One of our key challenges,” says Hamdani, “is implementing our system without any unnecessary delay, and the IMG 1010 has proven to be very easy to get up and running quickly.”

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### Results

Gaharu Telecom Indonesia now operates in all 10 of the largest cities in Indonesia (Jakarta, Bandung, Surabaya, Malang, Denpasar, Makassar, Solo, Medan, Palembang, and Semarang), and is the only Indonesian VoIP operator with POPs in all these cities, and each has an IMG 1010.

Overseas roaming with a prepaid card is available in Singapore, the USA and Canada, Australia, Malaysia, and Hong Kong, and Gaharu Telecom Indonesia is directly connected with the largest Indonesian cellular operators, including XL and Telkomsel, and is the only VoIP provider selling full national coverage to Telkomsel Mobile for voice termination other than Telkom. “We are now the largest licensed VoIP operator in Indonesia in terms of revenue, capacity, and network size,” reports Hamdani.

As market leader, Gaharu Telecom Indonesia earns approximately USD\$15 million in revenue annually, “and we expect it to rise 50% with our new Telkomsel termination business,” explains Hamdani. “To grow this quickly and maintain our leadership reputation, we must have equipment of the high quality and reliability of the IMG 1010.”

As to the future, Gaharu Telecom Indonesia is eyeing new opportunities. “The cost of Internet service has dropped drastically in Indonesia,” reports Hamdani, “and we expect that providing SIP phone service will give us a new growth opportunity — and we already know that the IMG 1010 can support us in this type of service too.”

### About Gaharu Telecom Indonesia

Established in Jakarta in 1999 by PT Gaharu Sejahtera, Gaharu Telecom Indonesia is an extremely successful, privately owned VoIP service provider in Indonesia with an estimated 60% share of the Indonesian VoIP market in 2009. Gaharu Telecom Indonesia’s “Hallophone” brand has become one of the most widely recognized in the region, and is synonymous with premium-quality voice service and customer care.

For more information, visit [www.gaharu.co.id](http://www.gaharu.co.id).

### About Dialogic Corporation

Dialogic Corporation is a leading provider of world-class technologies based on open standards that enable innovative mobile, video, IP, and TDM solutions for Network Service Providers and Enterprise Communication Networks. Dialogic’s customers and partners rely on its leading-edge, flexible components to rapidly deploy value-added solutions around the world.

For more information, visit [www.dialogic.com](http://www.dialogic.com).

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Information about Gaharu Telecom Indonesia has been provided by Gaharu Telecom Indonesia for this case study.