ipstar *
Broadband Satellite

Case Study

IPSTAR Enterprise Network Backhaul
IPSTAR Speeds up Customers on Their Way

Consumers expect a very quick stop every time they fuel up at a local gas station. Most of them swipe a credit card, have their payment validated and pump activated, and purchase a bottle of water or a cup of coffee in a matter of minutes. And before customers move on, transaction information from the pump and convenience store has already updated both database systems at the back office and corporate headquarters.

These customers do not think about the fundamental network that keeps the operations running behind the scene – from the credit and debit card authorizations, down to the tank level monitoring and store inventory. But nothing is more important for PTT than to offer value-added services that improve customer satisfaction and business operation on its 1,200 gas stations in Thailand. PTT relies on IPSTAR to securely and reliably connect gas stations to its corporate headquarters and transaction processors, and most importantly, to help speed up thousands of PTT customers on their way.

Benefits

Fast Connection
- Provide always-on broadband connection with up to 5 Mbps download and 4 Mbps upload speeds* for business-critical applications

Reduce Operation Cost
- Lessen business operation costs by implementing store services – such as PoS, SCADA and Wi-Fi – into a single IPSTAR network

Expand Business Easily
- Add new network facilities easily via IPSTAR's wide network coverage and rapid provisioning

Provide Business Continuity
- Keep businesses protected from costly network outages caused by natural or man-made disasters
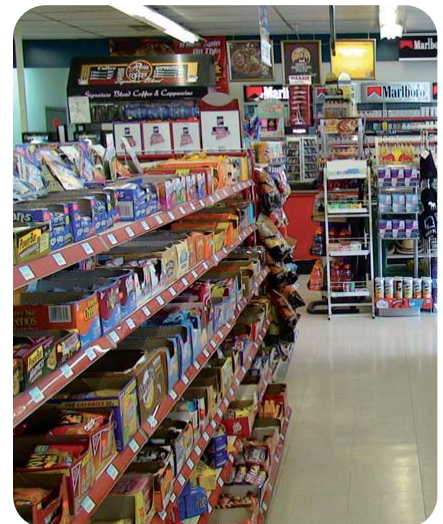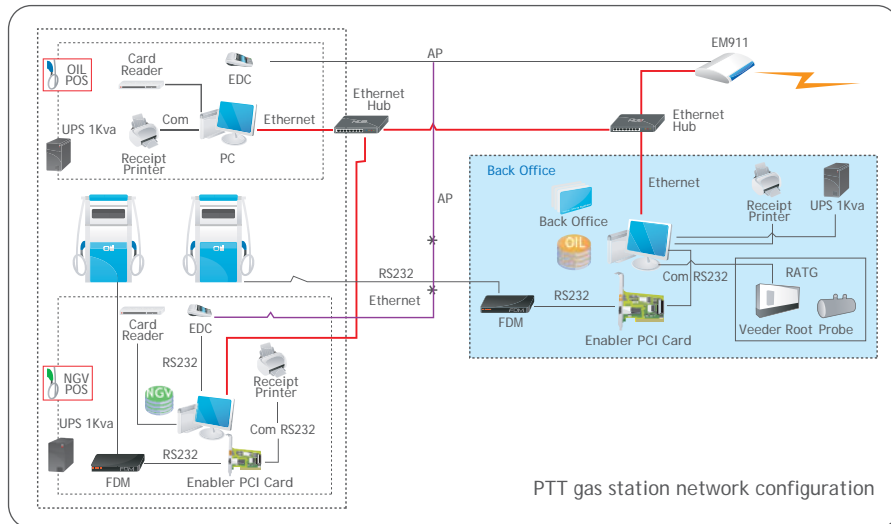
Rapid Deployment
- Quickly install the IPSTAR network and become fully operational in a matter of hours

Challenge
- Provide PTT gas stations with a secure and reliable backhaul for credit and debit card payment services
- Offer wireless broadband Internet access at the PTT gas station kiosks to attract new customers and to increase store revenue
- Enable PTT headquarters to accurately monitor tank levels and to retrieve sales inventory from each gas station

Solution
- Deploy IPSTAR Enterprise Network Solution – Point of Sale (PoS), Supervisory Control And Data Acquisition (SCADA) and Wi-Fi – to improve business operations, generate higher revenue and enhance customer experience at PTT's gas stations

* Maximum throughput is not applicable for simultaneous download and upload. Maximum throughput for simultaneous download and upload is 4 Mbps receive and 2 Mbps transmit.

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PTT gas station network configuration

The Situation

PTT gas stations were previously using a costly dial-up and frame relay backhaul to connect to the corporate headquarters and payment processors every time a transaction is made at the pump or the convenience store. Each time a debit or credit card is swiped at the PoS terminal, cashiers use the slow dial-up and frame relay network to validate and post the transaction, taking up an average time of 20 seconds to complete the whole process. In addition, the gas stations utilize the same technology for other crucial office tasks – such as remote monitoring of tank levels, and online uploading of daily sales and inventory.

But just when gas stations are shifting towards faster and more reliable backhaul for PoS, SCADA and Wi-Fi, PTT found out that their previous dial-up and frame relay network could no longer support the connectivity and cost requirements needed to be competitive in today's market. Because of this, PTT shifted to IPSTAR to support the ever-growing demand for value-added services at its gas stations.

The Solution

IPSTAR is designed to empower enterprises with a network infrastructure that securely connects businesses, employees and shoppers to high speed broadband satellite. IPSTAR provides highly reliable communication links with guaranteed quality of service, regardless of the number of business applications connected on a single network. In addition, satellite broadband does not utilize the same last mile loop facilities used by terrestrial broadband providers, making business operations and continuity protected against natural or man-made disasters.

The IPSTAR Enterprise Network Solution enables PTT to expand beyond just processing credit and debit card payments. With satellite broadband, 350 PTT gas stations are also now running vital back office functions – such as emails, inventory management and tank level monitoring. In addition to these store-enhancing benefits, IPSTAR allows forecourt kiosks to offer Internet surfers with high speed Wi-Fi access – providing a more pleasant fueling experience for customers, and ultimately, retaining their loyalty.

Proof-of-Concept

The provision of IPSTAR in 350 PTT gas stations enables both staff and customers to avail of the speedy service that they need at the forecourt's pumps and stores. Now with IPSTAR, PTT is able to provide gas stations with services such as PoS, SCADA and Wi-Fi – all in a single IPSTAR network.

IPSTAR enables high speed and always-on broadband access, enabling gas stations to deliver more value-added services and deploy more applications easier – which dial-up or other ground-based networks cannot cost-effectively provide. With nearly a quarter of a million IPSTAR user terminals deployed in 14 countries in Asia-Pacific, IPSTAR has achieved an unmatched level of trust in helping business companies succeed – like in the case of PTT.

IPSTAR Enterprise Network Solution Enables:

Faster PoS
With IPSTAR, credit and debit card transaction times are significantly reduced with purchases authorized in 1 to 2 seconds, down from the 20-second processing time that it normally takes with dial-up – allowing service stations to lessen customer waiting time, while simultaneously, increase customer traffic.

High Speed Wi-Fi
With IPSTAR, gas stations can provide customers with high speed Wi-Fi service, and at the same time, keep them stay longer at the Internet kiosks – enabling stores to offer new sources of revenue through the promotion of activities, sundries, food, and other goods and services available at the gas station.

Real-Time SCADA
With IPSTAR, gas and oil companies are able to monitor tank levels and detect system errors by using a real-time SCADA network, allowing gas stations to provide timely fuel replenishment and decision makers to act promptly in cases of system leaks or damage.

Reliable Back Office Services
With IPSTAR, corporate headquarters can remotely retrieve transaction data from each business location, making daily sales and inventory polling easier for every gas station.

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