THURAYA

Enabling Scalable and Affordable ATM Connectivity in Emerging Markets

Case Study:
Banking

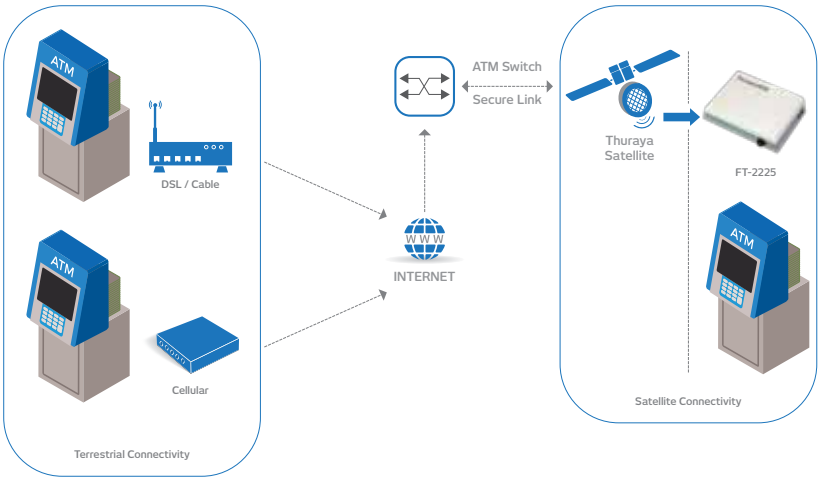
Products:
FT2225

Abstract

Automated Teller Machines (ATMs) require high-availability and secure IP connectivity. Traditionally, where terrestrial infrastructure is unavailable, this connectivity is provided via dedicated Very Small Aperture Terminals (VSATs). Thuraya M2M Mobile Satellite Services (MSS) partnered with ViaSat managed service and network, utilizes a low-latency and highly-secure worldwide satellite network to provide a significantly improved value proposition over existing satellite-based alternatives.

ATM Network Brief

ATM network architectures are based on a standard client/server model. An ATM Switch is used by financial institutions to route transactions between remote ATM Clients and core banking systems. ATM Clients provide the user interface/local functionality to generate requests to the server. ATMs are located in many venues and need to rely on the local communications infrastructure to provide IP connectivity to the centralized ATM Server. Local communications infrastructure may be comprised of a variety of technologies including wired terrestrial (e.g. cable, DSL, leased lines) and wireless terrestrial (e.g. 3G/4G cellular).



CASE STUDY

Thuraya m2m
POWERED BY ViaSat

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Emerging Market Challenges

In regions with underdeveloped terrestrial infrastructure, ATM IP connectivity may be forced to depend on unreliable connectivity options or higher-cost dedicated VSAT-based systems both of which may not fully cover the cyber secuirty risks.

Africa, the Middle East and East Asia have strong potential for future economic growth. However, financial institutions in these regions are challenged with finding an economic way to deploy their ATM network across large geographic areas that have limited cyber-secure IP connectivity options.

MSS Solution

Thuraya's M2M, powered by the ViaSat network, provides scalable, reliable, and cyber-secure IP connectivity, via a compelling value propisition, solving today's remote communication limitations. Thuraya's ATM solution includes:

- Worldwide high-availability coverage via our global L-band satellite constellation that is resistant to inclement weather conditions
- Terminals with simple installations, ruggedized to IP66 standards
- Static IP addressing to eliminate polling delays
- Full-duplex IP connectivity with embedded AES-256 encryption

Secure Financial Transactions

MSS uses the same encryption, AES-256, as commercial Virtual Private Network (VPN) routers. Your network becomes an extension of our terrestrial VPN tunnels, bridging through the satellite network, enabling secure end-to-end connections between the remote client (ATM) and the server (ATM Switch).

This AES-256 encryption, which is designed for FIPS 140 Level 2 compliance, facilitates implementation of secure communications for financial transaction activities, such as ANSI X9-based Financial Services.

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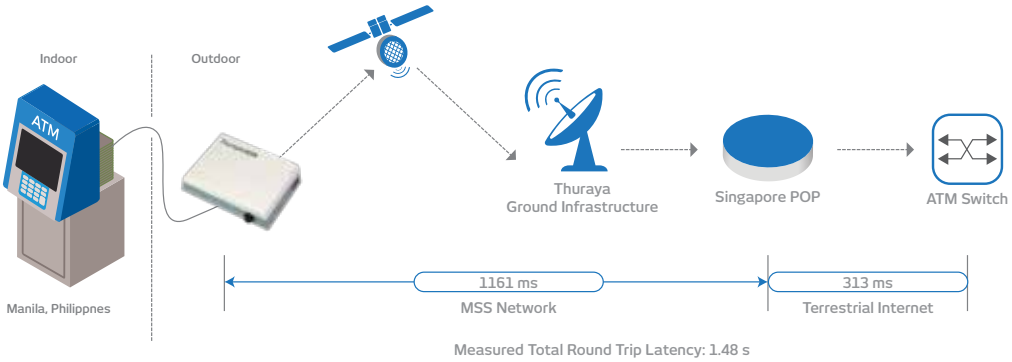
MSS Advantages vs Traditional VSAT

Traditional VSAT systems have been used when reliable terrestrial connectivity is not available. Advantages of MSS when compared with traditional VSAT systems include:

	MSS	Traditional VSAT
Simplicity	Single self-contained terminal with reduced footprint	Separate outdoor antenna and indoor modem units
Bandwidth Efficiency	Shared asynchronous on-demand bandwidth	Requires fixed-bandwidth point-to-point links
Costs	Offers lower CapEx & OpEx due to terminal simplicity and bandwidth efficiency	Traditional hardware and service contracts
Installation	Easy to mount and point	Requires precise pointing during installation
Security	Native AES-256 Link Layer Encryption	None

ATM Demonstration

In coordination with a Phillipine bank, ViaSat demonstrated a plug-and-play, connectivity of an existing ATM Client in the Philippines that was connected to the bank's ATM Server via the ViaSat MSS network. The ATM was powered on and operated securely and reliably with the ATM Server.



ATM Demonstration Setup and Measured Latency

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About Thuraya

Thuraya is a leading mobile satellite communications company that empowers people with tools to bring the organizations and communities they serve closer together. We offer innovative, flexible and dependable technology that helps you overcome the toughest challenges and achieve the highest aspirations – facilitating reliable communications where and when it matters most.

Our global customers include industry leaders from a variety of sectors including energy, media, marine, government and NGOs. Our superior network enables clear communications and uninterrupted coverage across two thirds of the world via satellite and across the globe through our unique GSM roaming capabilities.

Thuraya's robust secure two-way communications M2M network enables M2M and IoT application deployment beyond the confines of traditional cellular networks. By joining the alliance, Thuraya is looking to expand its solutions offering in areas such as rural IoT and M2M connectivity.

www.thuraya.com

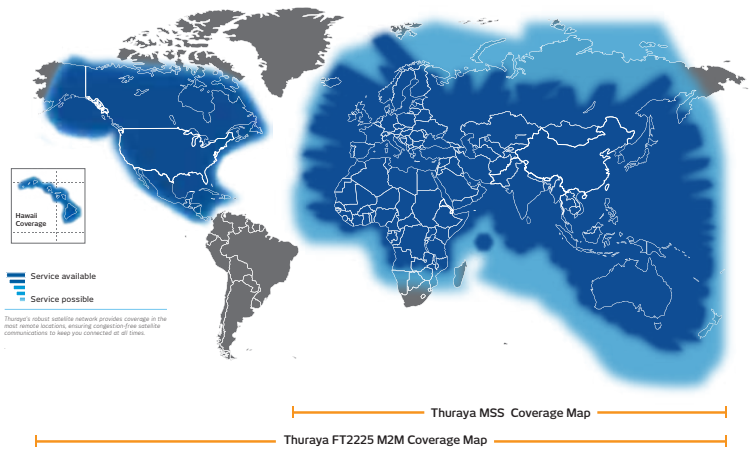
About ViaSat

ViaSat is on a mission to connect the world. As a global broadband services and technology company, ViaSat ensures consumers, businesses, and governments have communications access – anywhere – where on the ground or in-flight.

ViaSat Mobile Satellite Service (MSS) enables affordable, mission critical voice and data where you need it, augmenting cellular and Land Mobile Radio networks over our highly available, multicast network with low latency and AES256 encryption.

www.viasat.com/services/m2m

Thuraya Satellite Telecommunications Coverage Map



see more at: http://www.thuraya.com/products/215

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