A Pronto WiFi case study on Telecom Malaysia

INTRODUCTION

TMNet is Malaysia's number one provider of information communication technologies. The principal activity of the company is the establishment, maintenance and provision of telecommunications and related services.

BUSINESS CHALLENGE

Communities face challenges from various fronts in deploying a wireless access network. These include regulatory, technology choices, network planning and network operational issues. The marketplace and the nature of the technologies available imply that communities are now competing with existing wireline and wireless service providers. This puts communities in a unique position as they become both a service provider and a network provider, as well as continue to be consumers of existing telecom and data networking services from incumbent providers. Network operational issues now include designing and maintaining a network that is more than a "single-use" private enterprise network that happens to be wireless. This expands the scope of requirements related to customer management, accounting and billing, network and service guarantees.

The need of the hour was to provide a solution for a countrywide deployment of Wi-Fi hotspot services across hundreds of hotspot locations like airports, hotels etc. in a span of two months. TMNet wanted to support their existing user database repository and thus authenticate existing and new users for Internet access.

The problem, which they faced, was with their existing method of deployment was taking a significant amount of time. Operational challenges, imposed on them by technology limitations, put unreasonable constraints on the deployment choices. Hence, TMNet wanted to move from their existing platform to rollout large number of locations with high speed. They also wanted to monitor the WiFi mesh network using their own centralized Network Management System (NMS).

PRONTO'S SOLUTION

Pronto's technology is backed by years of experience in deploying and operating such high-tech up-to-date wireless networks across the world - from small hotspots in cafes and hotels and enterprise campuses, to municipal hotzones that covers entire cities. Pronto's UniFi OSS solution matched TMNet's existing infrastructure to offer WiFi service at various locations within a short timeframe. Pronto was able to exceed expectations and TMNet deployed 350 sites in a very short time.

The UniFi OSS is a carrier-grade software solution for deploying, provisioning and managing large scale, and public WLAN networks. Pronto authenticates the users using an external radius server. After an end user enters his credentials in the login page, OSS checks these with an external repository. External radius server validates these credentials and sends it back to the OSS. Based on this information OSS displays a success or error page on the user's browser.
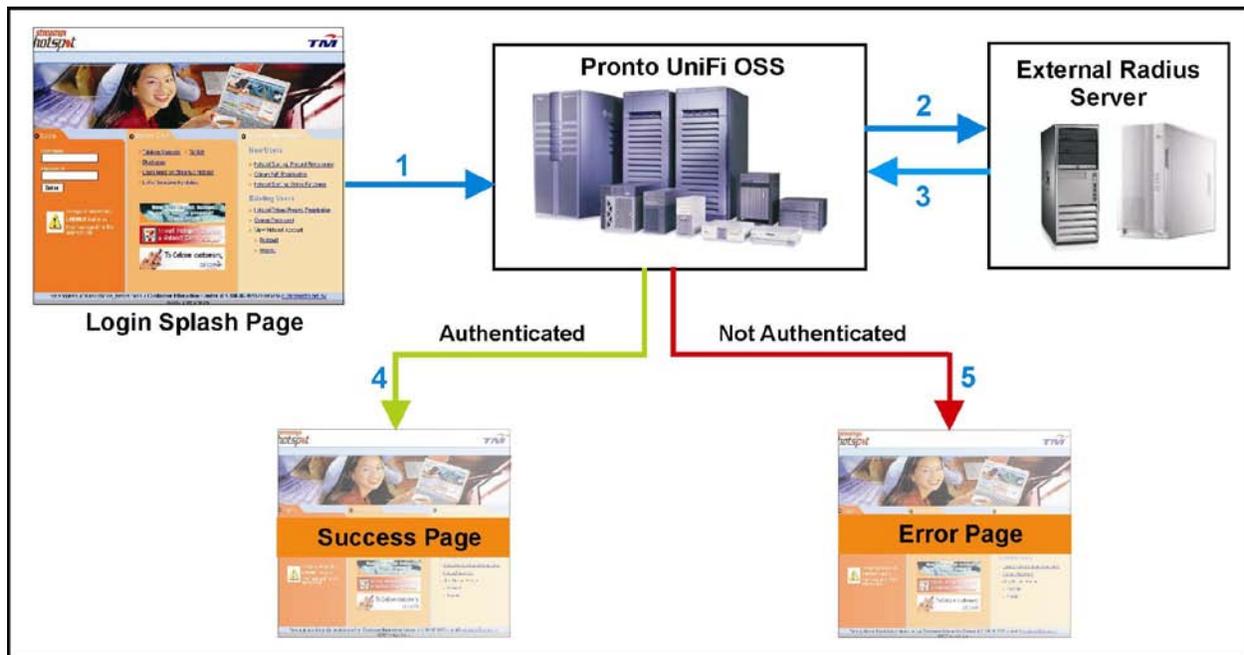
Using Pronto's UniFi OSS reporting capabilities, TMNet was able to customize the reporting process and send personalized reports like unique user access, access history details etc. to each location owner which helped in the analysis and decision making process.

Pronto's UniFi OSS provided a "Hot Redundancy" feature that allowed TMNet to provide uninterrupted services for mission critical applications. This feature enables automatic switch over to a hot standby server upon the failure of the previously active server. The switch over happens automatically without human intervention or the end users knowledge.
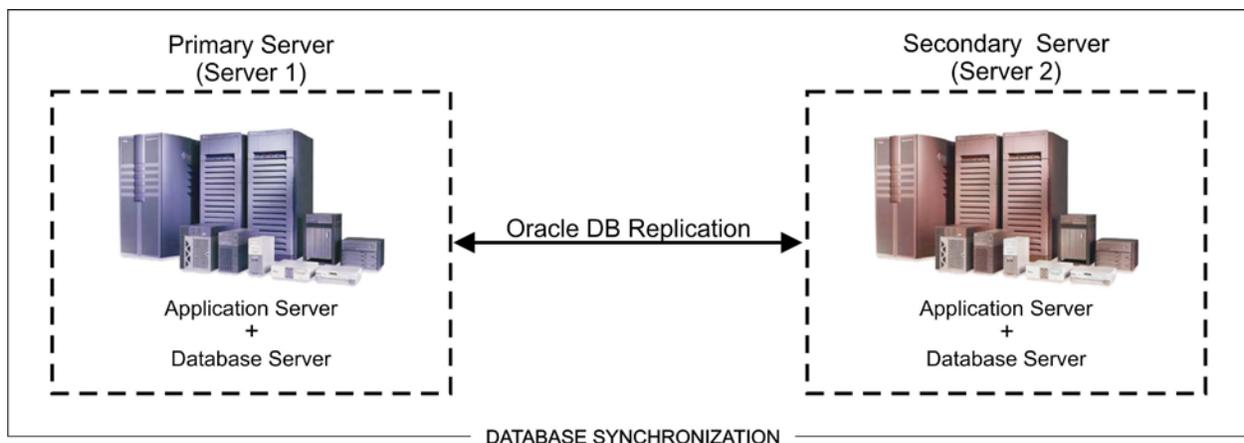

SOLUTION BENEFITS

- **Quick deployment:** The solution helps to deploy large number of locations in a short timeframe
- **Scalability:** The solution is highly scalable for enterprise deployments and can be expanded as the number of locations increase.

- **Hot redundancy:** Pronto UniFi OSS is a fully fault tolerant system. If the primary OSS fails, secondary OSS takes over the functioning of the main OSS. This feature enables automatic switch over to a hot standby server upon the failure of the previously active server.

Pronto Operation Support System Software – Summary

Pronto's software is a carrier-class Operations Support System for large-scale, public WLAN networks. The Pronto UniFi OSS is an open, standards-based Wi-Fi service delivery solution that enables rapid, cost-effective wireless broadband deployment and lower ongoing operational costs. The UniFi OSS provides a tightly integrated platform that enables plug-n-play provisioning of edge devices, real-time authentication, subscriber management, billing mediation, customer care, roaming settlement and network management, all in a single platform for optimal efficiency. A generic network architecture is described below:
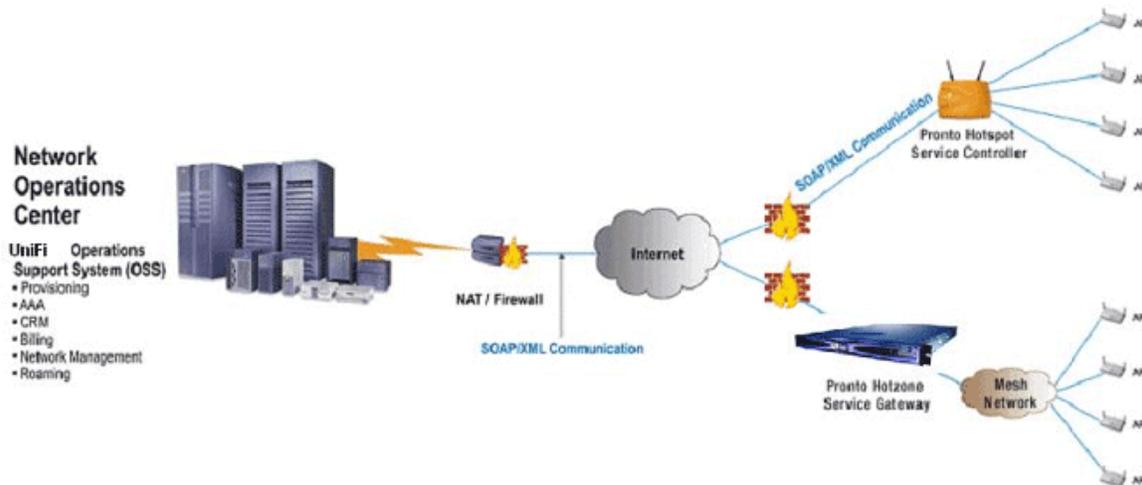
By utilizing the advanced functionality of the Pronto's UniFi OSS, TMNet used their existing user database repository to provide secure Wi-Fi access to existing and new customers. In a short timeframe TMNet was able to expand the Wi-Fi offering to over 3000 locations.

Additional information about Pronto Networks' products and services is available at www.prontonetworks.com, or by contacting our Sales offices.