



Case Study

NMS – Network Management System Vietnam Telecom National (VTN), Vietnam



RAD's Network Management Solutions Enable Incumbent Vietnamese Carrier to Efficiently Control Service Provisioning throughout the Country

VTN, the largest carrier in Vietnam, owns and operates the nation's backbone network, which connects 64 provinces via three sub-networks: VTN-1, with its network operations center (NOC) in Hanoi; VTN-2, servicing the Ho Chi Minh City area in the south; and VTN-3, controlled via Da Nang. In addition to providing inter-province connectivity to local carriers, VTN delivers business services to banks, corporations, and small to medium enterprises (SMEs), including virtual private networks (VPN), leased lines, voice, and video conferencing. "VTN has deployed over 10,000 units of RAD's multiservice access platforms (MAP) and Last Mile products to deliver these services," described Namson Tran, Managing Director of NTCOM VN, RAD's distribution partner in Vietnam, which supplied the devices and oversaw their implementation. The installed base includes a wide range of CPE (customer premises equipment), aggregation nodes and network edge devices.

"The large variety of products and services, as well as the vast geographical area they cover, can't be operated and administered without a carrier-grade network management system that provides effective control up to the customer premises," continued Tran, "which is why VTN has selected RAD's RADview-EMS (element management system) to achieve these goals."

Advanced FCAPS Functionalities

RADview-EMS is a Java-based, carrier-class element management system for Windows and UNIX environments. It manages RAD's TDM and next-generation devices using distributed client/server architecture and features advanced FCAPS (Fault, Configuration, Accounting, Performance, and Security) capabilities, accessible via a Web- or SNMP-based agent. Providing visual network representation with an intuitive GUI, RADview-EMS allows easy configuration, troubleshooting, diagnostics, and statistics collection by remote VTN operators.

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Namson Tran, Managing Director, NTCOM VN

Application

Network Management

Challenge

Manage a nation-wide network, consisting of a multitude of diverse access elements and delivering multiple business services

Solution

RAD's RADview EMS/NMS solutions

Benefits

- Complete network visibility
- Simplified operations
- Minimal downtime
- Easy management of user activities
- Remote access for servicing

Features

- Intuitive GUI
- Client/server architecture
- FCAPS functionalities
- Northbound OSS integration
- Business continuity and disaster recovery capabilities



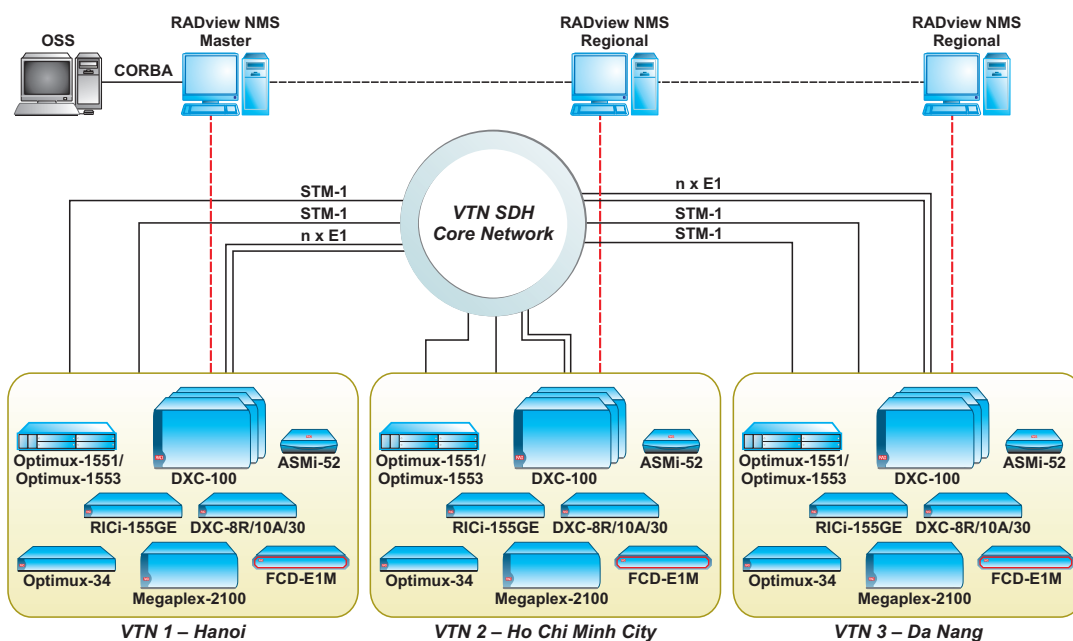
data communications

Each of VTN's three sub-network centers in Hanoi, Ho Chi Minh City and Da Nang is equipped with a RADview-EMS platform to autonomously manage VTN-1, 2 and 3, respectively. This includes remote provisioning and fault monitoring throughout the network. The three RADview NMS stations are interconnected to allow complete visibility across VTN's footprint; management authorization for each station, however, is restricted to its respective sub-network. Within the sub-network domains, RADview platforms allow VTN NOC personnel to define access levels for individual network elements according to menus, IP address range and other criteria.

Ensuring Service Continuity and Disaster Recovery

As the sole supplier of the telecom network services that connect the nation's provinces, VTN requires a high degree of protection to ensure service resiliency in the event of network failures. Luckily, RADview-EMS features enhanced support for business continuity and disaster recovery (DR). Each of the three RADview NMS stations serves as a backup system for the other two, with metro-level as well as local backup capabilities. RADview-EMS's Backup and Restore functions enable an efficient changeover from the main NMS to a redundant station without affecting the service. "Not only does RADview ensure seamless operations," said Ofer Rachman, General Manager, RAD Far East Ltd., "it also saves VTN the cost of additional DR software tools and expensive storage equipment."

"VTN is consistently pleased with the quality of RAD products and the level of support they offer for both current and future needs," concluded Tran. "The RADview NMS, for example, is already equipped with a range of northbound API (application programming interface) channels, so that when VTN decides to integrate it with its OSS (operations support systems), there's no need to upgrade the entire system."



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Ofer Rachman, General Manager,
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