Our Dreams Come True!

The TRUE Effect of Wireless Office in Bangkok

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Background

When TRUE Corporation started to consider the full broadband wireless office concept in 2003, they had approached a few vendors who could support wireless LAN equipment.

However, NEC was not in the list of vendors for the wireless LAN solution. At this stage, NEC had not yet announced the UNIVERGE products and solutions. When top executive of TRUE visited NEC in late 2003, NEC introduced the UNIVERGE concept for broadband IP solutions and introduced the UNIVERGE WL series, which is designed with enterprise class security and management.

The customer was cautious about the wireless security and NEC had proposed the solution to meet their expectations. Although the customer had already short listed a vendor
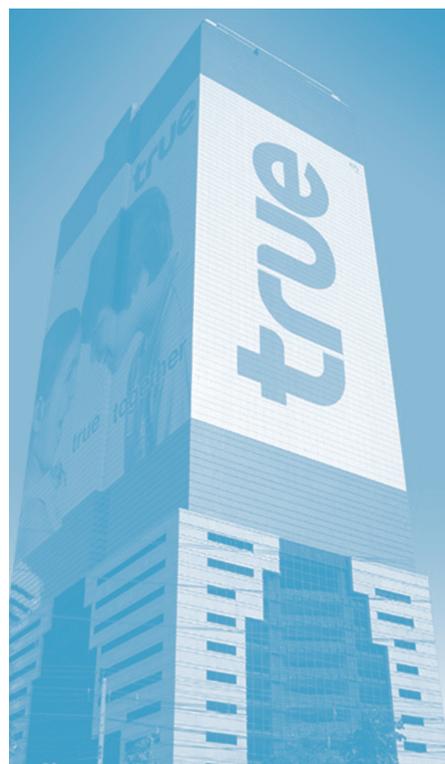
for the wireless LAN solution, they requested NEC to make a proposal in Bangkok and lease a system for evaluation in the customer's premises.

Presentation and Evaluation

NEC and NEC Corporation (Thailand) have quickly arranged a presentation session of our new UNIVERGE wireless LAN product and features. We have also formed an engineering team to support this project and brought a system at the customer's office and installed a trial system on the 29th floor for trails and

evaluation with the customer. We also showed the difference with the other vendor's product and let the customer to make a fair comparison.

The highlighted features of UNIVERGE WL series are;

1) Enterprise class security can be implemented.
   Support 802.1x, IP sec, SSID, RADIUS and other industry leading security system.
2) Automatic interference avoidance of channel and frequency.
3) Rogue access point detection and containment.
4) Load balancing for high traffic.
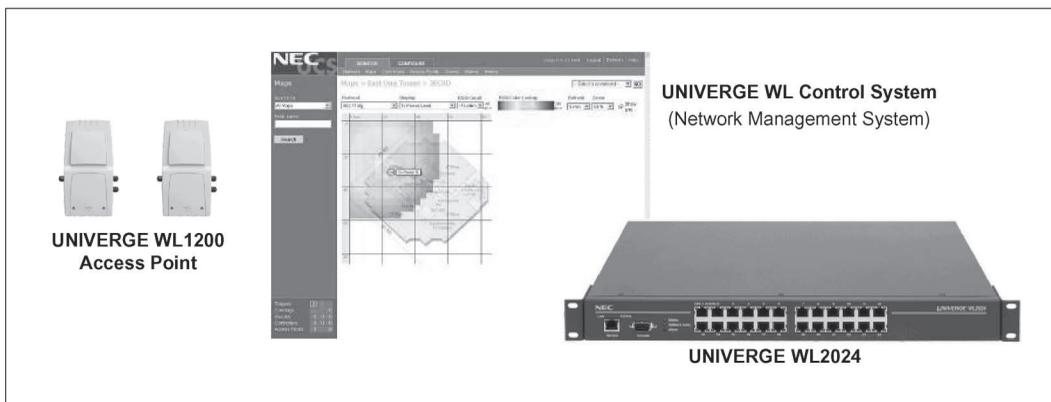
Fig. 1 UNIVERGE wireless LAN system.
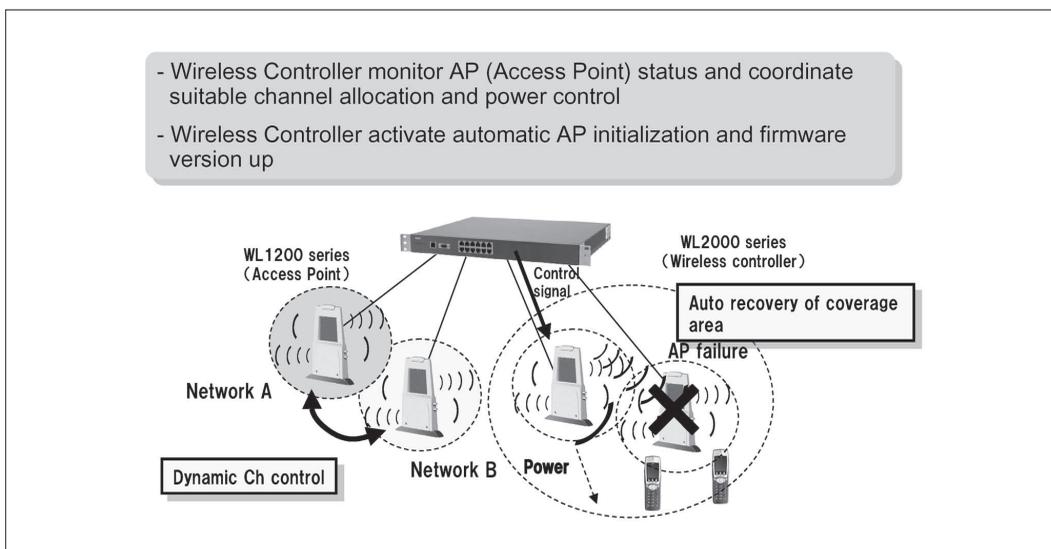
Fig. 2 Automatic interference avoidance of channel and frequency.
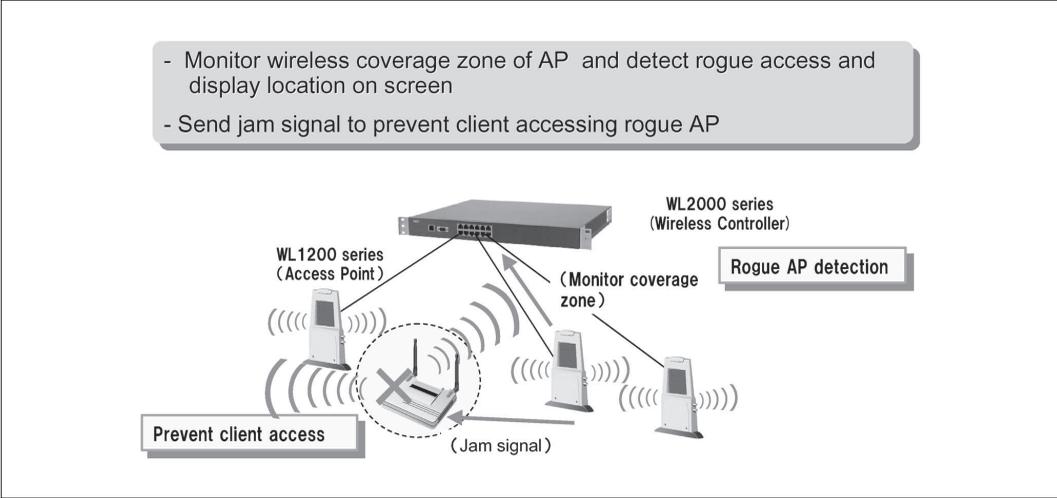
Fig. 3 Rogue access point detection and containment.
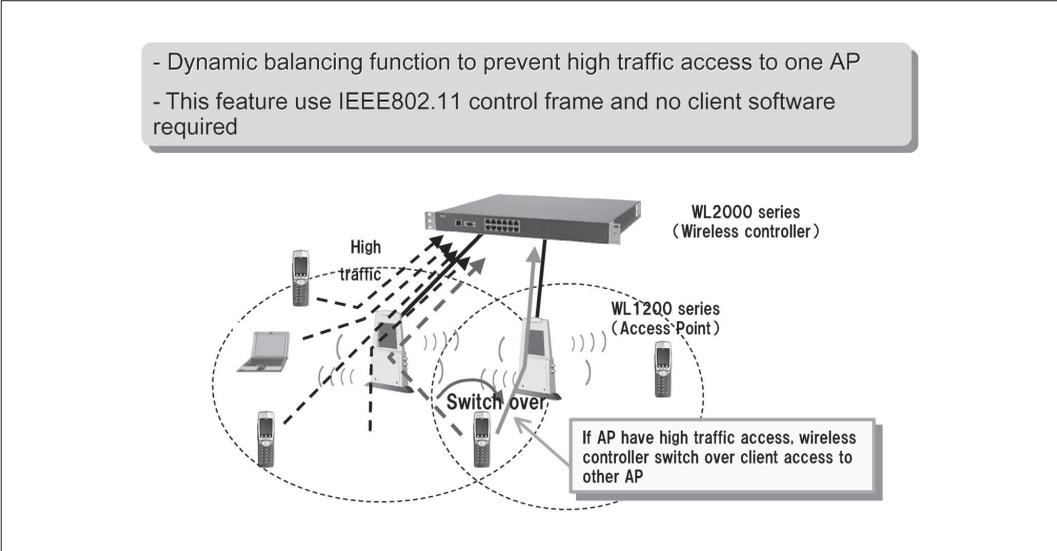
Fig. 4 Load balancing for high traffic.

Fig. 5 Dynamic system redundancy.

Management merit

WLAN radio reachable area will be apparent by GUI System.

Predict how a wireless network will change with time Coverage holes adversely affect service. Interference is a major problem must efficiently utilize limited bandwidth.
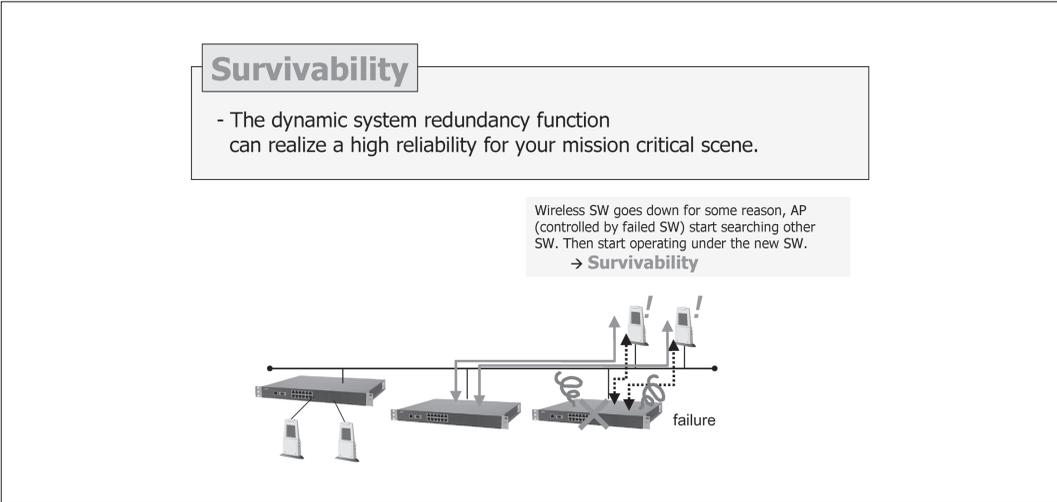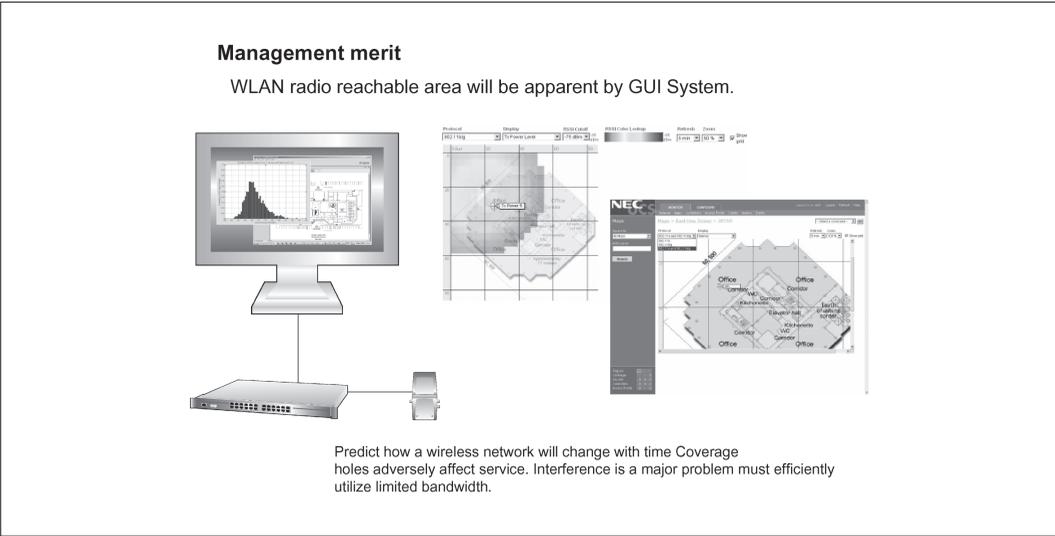
Fig. 6 Wireless LAN management system.

5) Dynamic system redundancy function.
6) The web based management system to monitor real time status.

Customer Requirement

The customer requested three levels of
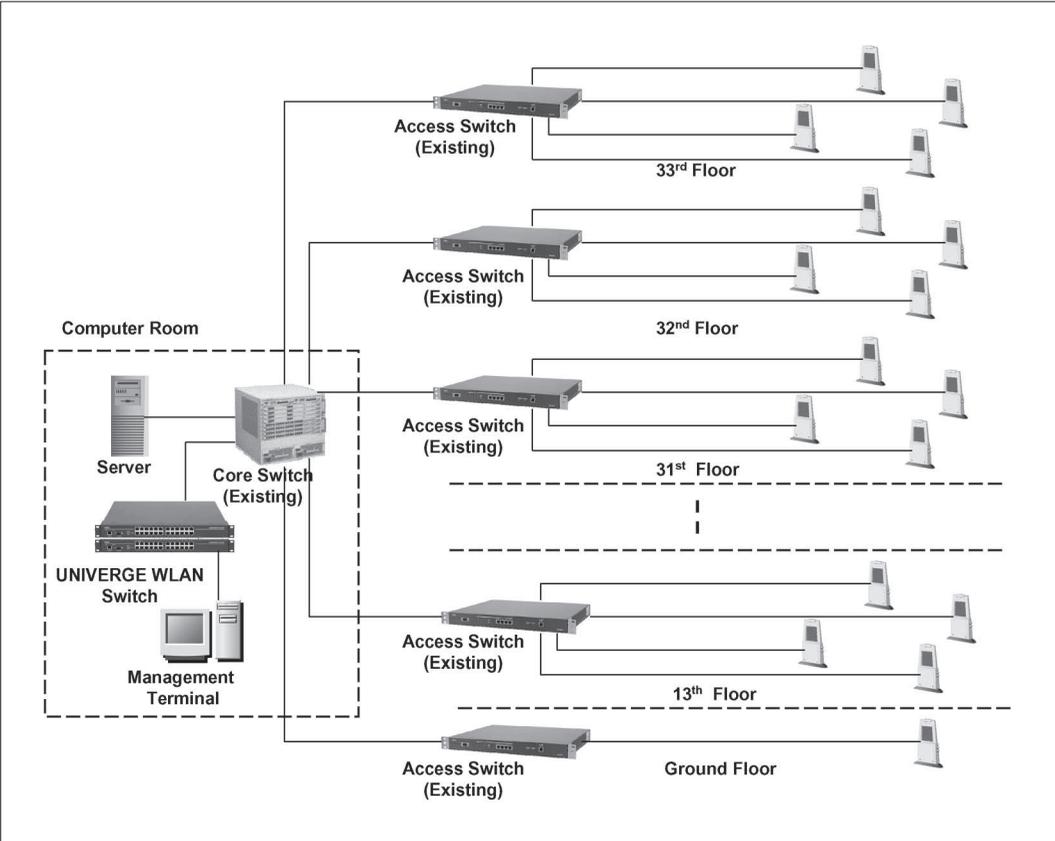
Fig. 7 TRUE headquarter wireless LAN network overview.

Photo 1 Open space café.

Photo 2 Entrance hall.

Photo 3 Free wireless access in working floors.

security access with wireless LAN.

· Level 1: 802.1x
· Level 2: Web authentication with WEP key
· Level 3: Open access without security

The TRUE staff will use 802.1x to access to servers with tight security. Level 3 open access is for guests and the guests will not be able to access to the corporate LAN network. One of the highlighted features of the UNIVERGE WL series is that APs can handle multiple security levels. To activate 802.1x, NEC engineers had to check the users PC OS, WLAN cards and the WLAN drivers of the user PCs. We have tested various PC models and WLAN cards that are used by the staff to make sure the 802.1x security activate successfully.

Implementation

After the test and evaluation process for about one month, NEC was successfully awarded to install the wireless LAN system for total 12 Floors of Headquarter building from the Ground Floor up to the 33rd Floor.
The 29th Floor, where the NEC trial system was installed for evaluation was opened for the press as a model office of the new TRUE broadband and wireless office.

The Broadband Wireless Office

The new broadband wireless office is designed to be able to work anywhere. The open space café is free for anyone to open the notebook PC over a cup of fresh brewed coffee. The employees can check their e-mail in this
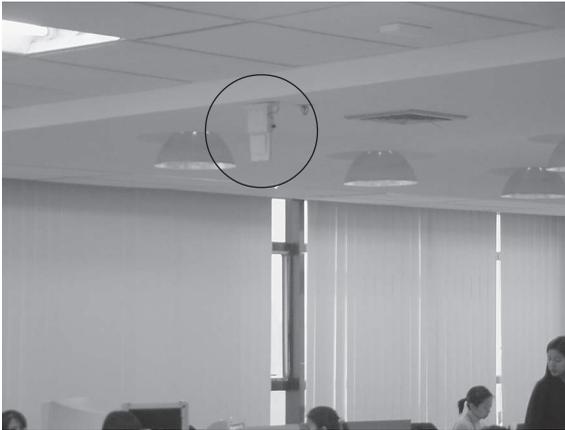
Photo 4 Access points attached on the ceiling.

Photo 5 Employees' lockers.

corner. The entrance hall has sofas and the working floors are free access by wireless. The employees do not have a fixed desk for work. They can find any open desk to sit down and work. NEC access points covering this office floor are easily attached on the ceiling. Each employee in this broadband office is given a locker to keep their belongings whenever they leave the office. Because of these new concepts, the new TRUE Headquarter is designed to be truly neat and spacious.

The TRUE Effect and Next Step

To summarize the benefit of the UNIVERGE WL series for the customer are;

1) Enterprise class security control can be implemented.
2) Customer's RADIUS server can be implemented for security control.
3) Reduce operation and maintenance cost for WLAN system via web based GUI to monitor and control the whole building.
4) Co-existence with other brand Access Points and control availability from NEC wireless LAN switch.
5) Future plan to integrate with SIP based wireless LAN handsets for voice call.

"We are excited with the implement of the first NEC UNIVERGE solution in Thailand. NEC is a long time partner for TRUE and we are sure that we can expect more innovation in the future with the UNIVERGE platform." Mr. Kosol Songsermmongkol, Network Planning & Development Expert of TRUE Corporation showed strong expectation to NEC.

TRUE is now the largest fixed phone line service provider in Bangkok metropolitan area with almost two million lines in use, the largest broadband operator in the country and a major player in the wireless, cellular and Internet markets. TRUE is also expecting the wireless users will have a big growth in Thailand and will focus to provide service in these sectors.

NEC will continuously support our customer for new innovation and service with the UNIVERGE platform and solutions.